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ACIDIC PRECIPITATION
IN ONTARIO STUDY

ANNUAL STATISTICS OF
CONCENTRATION AND DEPOSITION

DAILY PRECIPITATION AND
AIR MONITORING NETWORK
1988

MAY 1990



Environment
Environnement

Jim Bradley, Minister/ministre

ACIDIC PRECIPITATION IN ONTARIO STUDY
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DAILY PRECIPITATION AND AIR MONITORING NETWORK
1988

Report prepared for:
Air Resources Branch
Ontario Ministry of the Environment

Report prepared by:
A.P.I.O.S. Coordination Office
Ontario Ministry of the Environment

MAY 1990



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Dawson	17	3
Dorset	08	4
Egbert	20	5
Fernberg	16	6
Gowganda	18	7
High Falls	19	8
Longwoods	02	9
Melbourne	01	10
Nithgrove	07	11
North Easthope	03	12
Penn. State	n/a	13
Quetico Centre	14	14
Railton	10	15
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PART I

INTRODUCTION

INTRODUCTION

This report was prepared by Diane Green. The statistical summaries presented in this report pertain to the 1988 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) daily precipitation and air monitoring network. The relevant data can be obtained on request from the Air Resources Branch of the Ministry. All available data are utilized in the calculations except results reported as being unreliable (i.e. results are identified as unreasonable values by using the validation procedures; detailed description of the validation procedures is available from the Ministry upon request) or approximate (i.e., inexact results are reported due to laboratory difficulties, such as may be encountered in calibration, or when the sample cannot be re-analyzed to confirm the reported values). In a very few cases, concentration levels exceeded the upper limit of the range of the chemical analysis. Rather than using the upper limit, a decision was made to exclude these values from the statistics generated in this report. If a reported value is labelled as $<W$, it is replaced by a "zero". W is the level which the analytical technique cannot distinguish from zero. Prior to 1986, if a level was recorded less than the detection limit, T , a value corresponding to one half the detection limit is utilized for statistical calculations as reported in the statistical summaries. These values are not longer halved. Note that T is normally about ten times W , and values above the T criterion are considered to be precise and accurate. W corresponds to approximately one standard deviation of low level duplicates of real samples.

The reported precipitation gauge depth (standard range gauge or nipher shielded snow gauge) is utilized in the calculation of deposition. If a rain gauge value is not available then the collected sample value is converted to its equivalent precipitation depth and is used in the deposition calculation.

In the air concentration statistical summaries, "Nitric" represents "Nitric Acid" and "Totl NO_3 " represents total nitrates calculated by the summation of particulate "Nitrate" and "Nitric Acid". The air filter measurement for sulphur dioxide includes a contribution from nylon-filter impregnated SO_2 . In these reports the sulphur on nylon filters is interpreted as sulphur dioxide. However, it is possible that organic sulphur compounds also contribute to this loading.

Methods do not currently exist to quantify this contribution in routine network operation.

The statistical summaries presented in Parts III to VII include the number of samples, mean (arithmetic/geometric), standard deviation (arithmetic/geometric), maximum, minimum and quartiles and volume weighted means using precipitation gauge depths where appropriate.

PART II

STATION DESCRIPTION AND LOCATION MAP

LEGEND

1. Melbourne
2. Longwoods
3. N. Easthope
4. Wellesley
5. Raven Lake
6. Balsam Lake
7. Nithgrove
8. Dorset
9. Whitman Creek
- 9A. Wilmer
10. Railton
11. Charleston Lake
12. Graham Lake
13. Forbes Township
14. Quetico Centre
15. Lac La Croix
16. Fernberg
17. Dawson
18. Gowganda
19. High Falls
20. Egbert
21. Penn State (Pa)

0 300
Km



Ontario

Ministry
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Environment

APIOS DAILY SEQUENTIAL SAMPLERS
CONVERSION TO ERT FILTERS

1 9 8 8

DORSET 1	2-stage 47mm June22-July18	3-stage 47mm July19-Aug17	3-stage 50mm Aug18-onwards
DORSET 2	2-stage 47mm June22-July18	2-stage 47mm/6hr July19-Aug14	2-stage 50mm/6hr Aug15-Sept1
	2-stage 50mm Sept2-Oct19	3-stage 50mm Oct20-onwards	
EGBERT	3-stage 50mm from inception		
BALSAM LAKE	2-stage 47mm prior to Jun10	3-stage 47mm Jun10-Aug18	3-stage 50mm Aug19-onwards
PENN STATE 1 AND 2	2-stage 47mm May11-July1	3-stage 47mm July2-Aug31	3-stage 50mm Sept1-onwards
CHARLESTON LAKE	2-stage 47mm undetermined	3-stage 47mm undetermined	3-stage 50mm Dec13-onwards
FERNBERG	2-stage 47mm undetermined	3-stage 47mm undetermined	3-stage 50mm Oct-onwards
GOWGANDA	2-stage 47mm till JUL5	3-stage 47mm JUL6-AUG23	3-stage 50mm AUG24-onwards
HIGH FALLS	2-stage 47mm till JUL5	3-stage 47mm JUL6-AUG30	3-stage 50mm AUG31-onwards
LONGWOODS	2-stage 47mm till AUG22		3-stage 50mm 23Aug-onwards
WELLESLEY	2-stage 47mm till AUG22		3-stage 50mm 23 Aug-onwards

ONTARIO MINISTRY OF THE ENVIRONMENT
APLOS-ACIDIC PRECIPITATION IN ONTARIO STUDY
DAILY PRECIPITATION SITES

STATION ID	MOE REGION	STATION NAME	ELEV (M)	LATITUDE (NORTH)	LONGITUDE (WEST)	UTM GRID CO-ORDINATES (NORTHING) (EASTING)
000002-02-01-1011	SOUTHWESTERN	LONGWOODS	219	4°53'03"	81°28'50"	4747849 460756
000002-02-01-1021	SOUTHWESTERN	MELBOURNE	213	4°57'12"	81°33'27"	4747061 454401
000002-02-01-1031	SOUTHWESTERN	NORTH EASTHOPE	375	4°54'22"	80°53'45"	4805705 508434
000002-02-01-2011	SOUTHWESTERN	WELLESLEY	344	4°58'05"	80°45'33"	4812606 519481
000002-02-01-2031	SOUTHWESTERN	EGGERT	253	4°53'57"	79°46'53"	4888002 597322
000002-02-01-3011	CENTRAL	DORSET	320	4°53'25"	78°55'51"	5009657 662451
000002-02-01-3021	CENTRAL	NITHGROVE	325	4°52'03"	78°04'12"	5009221 730127
000002-02-01-3031	CENTRAL	BALHAM LAKE	259	4°53'45"	78°51'22"	4943776 670063
000002-02-01-3041	CENTRAL	RAVEN LAKE	274	4°53'40"	78°54'43"	4941655 665886
000002-02-01-4011	SOUTHEASTERN	CHARLESTON LAKE	92	4°59'50"	76°02'40"	4927414 416963
000002-02-01-4021	SOUTHEASTERN	HALLTOWN	152	4°52'34"	76°34'45"	4913518 533527
000002-02-01-4031	SOUTHEASTERN	CHATHAM LAKE	130	4°54'50"	76°51'45"	4940930 749090
000002-02-01-4081	SOUTHEASTERN	GOLDEN LAKE	160	4°53'48"	77°12'03"	5053226 328397
000002-02-01-4101	SOUTHEASTERN	WILMER	125	4°52'23"	76°31'50"	4921637 378195
000002-02-01-5061	NORTHEASTERN	GOWGANDA	343	4°39'04"	80°46'32"	5277329 516647
000002-02-01-5171	NORTHEASTERN	HIGH FALLS	215	4°52'55"	81°32'43"	5136412 458068
000002-02-01-6051	NORTHWESTERN	FERNBURG	506	47°56'51"	91°29'26"	5311349 612714
000002-02-01-6071	NORTHWESTERN	QUETTICO CENTRE	420	48°24'44"	91°12'08"	5363461 633036
000002-02-01-6131	NORTHWESTERN	LAWSON	381	48°33'38"	89°38'60"	5381779 304475
000002-02-01-7011	QUEBEC	SUTTON	243	45°04'35"	72°40'35"	4993846 682898
000002-02-01-7021	PENNSYLVANIA	PENN. STATE	120	40°47'18"	77°56'41"	4519229 251390

ONTARIO MINISTRY OF THE ENVIRONMENT
APICS-ACIDIC PRECIPITATION IN ONTARIO STUDY
DAILY AMBIENT AIR SITES

STATION ID	MOE REGION	STATION NAME	ELEV (M)	LATITUDE (NORTH)	LONGITUDE (WEST)	UTM GRID CO-ORDINATES (NORTHING) (EASTING)
000002-21-21-1011	SOUTHWESTERN	LONGWOODS	239	42°53'03"	81°28'50"	4747849 460756
000002-21-21-2011	SOUTHWESTERN	WELLESLEY	344	43°28'05"	80°45'33"	4712606 519481
000002-21-21-2031	SOUTHWESTERN	EGBERT	253	44°13'57"	79°46'53"	4898202 597322
000002-21-21-3011	CENTRAL	FORGET	470	41°13'25"	78°55'51"	5009456 662429
000002-21-21-3031	CENTRAL	BALSAM LAKE	259	44°37'45"	78°51'22"	4543776 670063
000002-21-21-4011	SOUTHEASTERN	CHARLESTON LAKE	92	44°29'50"	76°02'40"	4327414 416963
000002-21-21-5061	NORTHEASTERN	CONKANDA	434	47°39'04"	80°46'32"	5677129 516647
000002-21-21-5171	NORTHEASTERN	HIGH FALLS	215	46°22'55"	81°32'43"	5136412 458068
000002-21-21-6051	NORTHWESTERN	FERNBURG	506	47°56'51"	91°29'26"	5311349 612714
000002-21-21-7021	PENNSYLVANIA	PENN. STATE	170	40°47'18"	77°56'47"	4519229 251390

PART III

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

PERIOD OF REPORT : JAN 3,88 TO DEC 29,88

# OF SAMPLES	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
MAXIMUM	: 128	: 122	: 7.7	: 125	: 125	: 125	: 124
MINIMUM	: 72.0	: 87.0	: 7.5	: 7.8	: 0.3311	: 0.3400	: 21.30
RANGE	: 0.1	: 1.0	: 3.7	: 3.5	: 0.0000	: 0.0119	: 0.00
ARITH. MEAN	: 71.9	: 86.0	: 3.8	: 4.3	: 0.3311	: 0.3281	: 21.30
ARITH. STD. DEV	: 5.9	: 25.9	: 4.5	: 4.7	: 0.0421	: 0.0601	: 2.73
GEOM. MEAN	: 8.8	: 18.7	: 0.7	: 1.1	: 0.0069	: 0.0532	: 2.71
1ST QUANTILE	: 2.7	: 19.0	: 4.5	: 4.8	: 0.0117	: 0.0509	: 1.86
2ND QUANTILE	: 1.1	: 10.8	: 4.1	: 4.2	: 0.0079	: 0.0279	: 0.95
3RD QUANTILE	: 3.3	: 22.0	: 4.3	: 4.5	: 0.0306	: 0.0527	: 2.02
VOL. WGT. MEAN	: 7.2	: 36.8	: 4.6	: 5.1	: 0.0646	: 0.0926	: 3.55
	: *****	: 25.9	: *****	: *****	: 0.0488	: 0.0762	: 3.01
# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
MAXIMUM	: 122	: 116	: 124	: 116	: 116	: 115	: 122
MINIMUM	: 2.620	: 5.500	: 1.270	: 0.700	: 0.805	: 0.705	: 1.640
RANGE	: 0.000	: 0.020	: 0.000	: 0.000	: 0.000	: 0.005	: 0.000
ARITH. MEAN	: 2.620	: 5.480	: 1.270	: 0.700	: 0.805	: 0.700	: 1.640
ARITH. STD. DEV	: 0.493	: 0.575	: 0.222	: 0.062	: 0.053	: 0.115	: 0.405
GEOM. MEAN	: 0.459	: 0.707	: 0.243	: 0.083	: 0.099	: 0.115	: 0.391
1ST QUANTILE	: 0.255	: 0.339	: 0.154	: 0.045	: 0.035	: 0.047	: 0.238
2ND QUANTILE	: 0.125	: 0.160	: 0.060	: 0.015	: 0.015	: 0.020	: 0.121
3RD QUANTILE	: 0.515	: 0.355	: 0.125	: 0.040	: 0.030	: 0.047	: 0.290
VOL. WGT. MEAN	: 0.250	: 0.730	: 0.310	: 0.070	: 0.055	: 0.105	: 0.530
	: 0.569	: 0.421	: 0.163	: 0.052	: 0.034	: 0.062	: 0.410

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

PERIOD OF REPORT : JAN 4,88 TO DEC 29,88

	PRECIP.		CONDUCT.	PH FIELD	PH LAB	FREE H+		TOTAL H+		SULPHATE	
	MM	MM	UMHO/CM			LAB MG/L	MG/L	GRAN MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	104	91		33	93	93	93	93	93	95	95
MAXIMUM	38.6	94.5		5.2	7.3	0.2618	0.3800	0.3800	0.3800	13.00	13.00
MINIMUM	0.2	2.0		3.6	3.6	0.0000	0.0164	0.0164	0.0164	0.00	0.00
RANGE	38.4	92.5		1.6	3.8	0.2618	0.3636	0.3636	0.3636	13.00	13.00
ARITH. MEAN	7.2	31.8		4.3	4.4	0.0651	0.0953	0.0953	0.0953	3.33	3.33
ARITH. STD. DEV	8.2	22.6		0.4	0.6	0.0582	0.0705	0.0705	0.0705	2.75	2.75
GEOM. MEAN	3.7	23.6		4.3	4.4	0.0385	0.0750	0.0750	0.0750	2.00	2.00
1ST QUANTILE	1.6	13.5		4.0	4.1	0.0254	0.0460	0.0460	0.0460	1.43	1.43
2ND QUANTILE	4.4	24.5		4.2	4.3	0.0501	0.0731	0.0731	0.0731	2.45	2.45
3RD QUANTILE	9.2	43.8		4.5	4.6	0.0822	0.1160	0.1160	0.1160	4.57	4.57
VOL. WGT. MEAN	*****	22.5		*****	*****	0.0454	0.0704	0.0704	0.0704	2.47	2.47
	NITRATE		CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM		SODIUM		AMMONIUM	
	AS N MG/L	AS N MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	AS N MG/L
# OF SAMPLES	95	91		95	91	91	91	91	91	94	94
MAXIMUM	3.460	3.520		1.530	0.790	0.255	0.255	0.690	0.690	1.720	1.720
MINIMUM	0.020	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.026	0.026
RANGE	3.440	3.520		1.530	0.790	0.255	0.255	0.690	0.690	1.694	1.694
ARITH. MEAN	0.757	0.392		0.275	0.068	0.035	0.035	0.091	0.091	0.407	0.407
ARITH. STD. DEV	0.643	0.521		0.333	0.102	0.039	0.039	0.131	0.131	0.346	0.346
GEOM. MEAN	0.526	0.229		0.210	0.056	0.030	0.030	0.055	0.055	0.282	0.282
1ST QUANTILE	0.310	0.060		0.050	0.010	0.012	0.012	0.017	0.017	0.180	0.180
2ND QUANTILE	0.560	0.200		0.160	0.035	0.020	0.020	0.035	0.035	0.298	0.298
3RD QUANTILE	1.055	0.540		0.310	0.087	0.040	0.040	0.100	0.100	0.558	0.558
VOL. WGT. MEAN	0.425	0.203		0.177	0.034	0.023	0.023	0.041	0.041	0.307	0.307

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131
PERIOD OF REPORT : DEC 31,87 TO DEC 30,88

	PRECIP.		CONDUCT.	PH FIELD	PH LAB	FREE H ⁺		TOTAL H ⁺		SULPHATE
	MM	UNHO/CM				LAB	MG/L	GRAN	MG/L	
# OF SAMPLES	104	78			77	77		77		78
MAXIMUM	46.6	95.5		*****	7.4	0.0851		0.1220		7.55
MINIMUM	0.1	1.0		*****	4.1	0.0000		0.0153		0.00
RANGE	46.5	94.5		*****	3.3	0.0851		0.1067		7.55
ARITH. MEAN	7.4	13.2		*****	5.2	0.0148		0.0359		1.51
ARITH. STD. DEV	8.0	13.1		*****	0.7	0.0183		0.0222		1.48
GEOM. MEAN	3.6	9.4		*****	5.2	0.0060		0.0313		1.03
1ST QUARTILE	2.0	5.8		*****	4.7	0.0030		0.0217		0.63
2ND QUARTILE	5.2	10.0		*****	5.2	0.0064		0.0258		1.02
3RD QUARTILE	9.6	17.0		*****	5.5	0.0160		0.0390		1.85
VOL. WGT. MEAN	*****	10.8		*****	*****	0.0116		0.0325		1.37
	NITRATE		CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM		SODIUM		AMMONIUM
	AS N MG/L	MG/L				MG/L	AS N MG/L	MG/L	AS N MG/L	
# OF SAMPLES	78	79		78	79	79		79		79
MAXIMUM	2.000	1.800		3.730	0.250	0.315		1.710		4.130
MINIMUM	0.000	0.000		0.000	0.000	0.000		0.000		0.000
RANGE	2.000	1.800		3.730	0.250	0.315		1.710		4.130
ARITH. MEAN	0.353	0.284		0.159	0.041	0.046		0.105		0.360
ARITH. STD. DEV	0.316	0.365		0.431	0.052	0.051		0.221		0.524
GEOM. MEAN	0.259	0.240		0.164	0.050	0.043		0.060		0.232
1ST QUARTILE	0.165	0.060		0.030	0.008	0.015		0.020		0.100
2ND QUARTILE	0.260	0.140		0.080	0.025	0.025		0.040		0.260
3RD QUARTILE	0.435	0.300		0.150	0.045	0.065		0.108		0.500
VOL. WGT. MEAN	0.282	0.283		0.093	0.040	0.046		0.071		0.311

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08

PERIOD OF REPORT : DEC 31,87 TO DEC 31,88

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	218	186	119	193	193	194	189
MAXIMUM	32.4	95.5	6.5	7.4	0.4266	0.5220	17.30
MINIMUM	0.0	2.0	3.4	3.4	0.0000	0.0116	0.00
RANGE	32.4	93.5	3.1	4.1	0.4265	0.5104	17.30
ARITH. MEAN	4.7	25.7	4.4	4.6	0.0494	0.0756	2.53
ARITH. STD. DEV	5.9	19.1	0.4	0.7	0.0517	0.0590	2.61
GEOM. MEAN	1.8	18.9	4.4	4.5	0.0258	0.0598	1.57
1ST QUARTILE	0.6	10.8	4.1	4.2	0.0158	0.0367	0.80
2ND QUARTILE	2.2	22.3	4.3	4.4	0.0355	0.0604	1.80
3RD QUARTILE	6.6	35.5	4.6	4.8	0.0684	0.0978	3.22
VOL. WGT. MEAN	*****	24.7	*****	*****	0.0484	0.0727	2.34
	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	189	170	188	170	171	171	195
MAXIMUM	4.200	2.220	10.860	0.475	0.885	1.010	2.150
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	4.200	2.220	10.860	0.475	0.885	1.010	2.150
ARITH. MEAN	0.630	0.320	0.300	0.045	0.063	0.110	0.335
ARITH. STD. DEV	0.594	0.443	0.844	0.066	0.076	0.154	0.363
GEOM. MEAN	0.415	0.209	0.181	0.042	0.036	0.067	0.183
1ST QUARTILE	0.200	0.060	0.065	0.010	0.015	0.025	0.070
2ND QUARTILE	0.490	0.140	0.135	0.020	0.025	0.050	0.240
3RD QUARTILE	0.920	0.320	0.295	0.050	0.050	0.130	0.438
VOL. WGT. MEAN	0.511	0.211	0.172	0.031	0.029	0.071	0.330

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EGBERT

PERIOD OF REPORT : NOV 29,88 TO DEC 31,88

# OF SAMPLES	PRECIP. MM	CONDUCT. UMH/CM	PH FIELD	PH LAB	PRECIP. LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
19	7.8	25.0	0	13	13	12	9
MAXIMUM	7.8	25.0	*****	6.3	0.0490	0.0740	3.50
MINIMUM	0.2	4.0	*****	6.7	0.0006	0.0127	0.10
RANGE	7.6	21.0	*****	1.4	0.0484	0.0613	3.40
ARITH. MEAN	1.6	11.0	*****	4.9	0.0203	0.0423	0.96
ARITH. STD. DEV	2.3	7.0	*****	0.6	0.0174	0.0208	1.09
GEOM. MEAN	0.9	9.3	*****	4.9	0.0121	0.0373	0.60
1ST QUARTILE	0.4	6.3	*****	4.4	0.0062	0.0250	0.32
2ND QUARTILE	0.6	8.3	*****	4.8	0.0128	0.0408	0.52
3RD QUARTILE	1.1	15.0	*****	5.1	0.0293	0.0592	0.70
VOL. WGT. MEAN	*****	10.4	*****	*****	0.0238	0.0430	1.08

# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
9	0.620	1.580	0.780	0.120	9	9	8
MAXIMUM	0.050	1.080	0.000	0.010	0.005	0.805	0.140
MINIMUM	0.530	1.500	0.700	0.310	0.035	0.035	0.036
RANGE	0.316	0.444	0.267	0.071	0.045	0.770	0.104
ARITH. MEAN	0.153	0.470	0.727	0.096	0.019	0.290	0.092
ARITH. STD. DEV	0.278	0.301	0.00	0.042	0.013	0.203	0.038
GEOM. MEAN	0.215	0.160	0.095	0.020	0.016	0.178	0.084
1ST QUARTILE	0.305	0.230	0.235	0.032	0.010	0.075	0.058
2ND QUARTILE	0.335	0.460	0.290	0.065	0.015	0.090	0.100
3RD QUARTILE	0.355	0.263	0.279	0.043	0.010	0.322	0.122
VOL. WGT. MEAN	0.268	0.263	0.279	0.043	0.019	0.171	0.083

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16

PERIOD OF REPORT : JAN 1.08 TO DEC 31.08

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAD MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	153	112	0	108	108	108	114
MAXIMUM	69.2	42.5	*****	7.3	0.0661	0.0958	8.10
MINIMUM	0.1	0.5	*****	4.2	0.0001	0.0103	0.00
RANGE	69.1	42.0	*****	3.1	0.0660	0.0855	8.10
ARITH. MEAN	5.8	8.9	*****	5.6	0.0079	0.0262	1.11
ARITH. STD. DEV	9.9	7.8	*****	0.8	0.0118	0.0142	1.25
GEOM. MEAN	1.7	6.4	*****	5.6	0.0022	0.0236	0.72
1ST QUANTILE	0.5	3.5	*****	5.1	0.0004	0.0175	0.35
2ND QUANTILE	2.3	7.0	*****	5.4	0.0036	0.0206	0.80
3RD QUANTILE	6.4	11.0	*****	6.4	0.0087	0.0292	1.25
VOL. MGT. MEAN	*****	7.1	*****	*****	0.0076	0.0260	0.92
	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	114	106	114	106	106	106	120
MAXIMUM	1.590	1.900	0.840	0.330	0.320	1.830	2.010
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	1.590	1.900	0.840	0.330	0.320	1.830	2.010
ARITH. MEAN	0.265	0.256	0.094	0.043	0.044	0.077	0.306
ARITH. STD. DEV	0.300	0.360	0.106	0.065	0.053	0.220	0.361
GEOM. MEAN	0.211	0.216	0.116	0.054	0.038	0.046	0.157
1ST QUANTILE	0.115	0.040	0.040	0.010	0.012	0.015	0.066
2ND QUANTILE	0.240	0.140	0.070	0.020	0.025	0.030	0.188
3RD QUANTILE	0.400	0.260	0.120	0.035	0.050	0.055	0.395
VOL. MGT. MEAN	0.227	0.151	0.054	0.025	0.031	0.031	0.282

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
 APFOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
 SUMMARY STATISTICS OF CONCENTRATION

STATION = COMBANDA AEROCHEM SITE NO. 1

	EQUIVALENT PREC. DEPTH MM	CONDUCT UMHO/CM	FIELD PH	LAB. PH	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
# OF SAMPLES	167.0	167	167	167	167	167	167
MAXIMUM	37.0	80.00	5.250	7.64	31.40	1.88	0.90
MINIMUM	0.0	1.00	3.560	3.55	0.10	0.09	0.00
ARITH. MEAN	4.2	17.58	4.446	4.77	2.11	0.34	0.15
ARITH. STD. DEV	6.2	16.78	0.397	0.67	3.62	0.41	0.16
GEOM. MEAN	4.2	11.18	4.428	4.73	1.14	0.19	0.12
1ST QUANTILE	0.2	5.00	4.32	4.32	0.50	0.03	0.04
2ND QUANTILE	1.3	13.50	4.400	4.66	1.20	0.19	0.10
3RD QUANTILE	5.8	24.13	4.720	5.93	2.80	0.47	0.24
VOL. WGT. MEAN	1.4	14.23	4.493	4.77	1.53	0.25	0.12
MISSING VALUES	32.0	79	100	79	78	78	83

	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	ACIDITY GRAN UG/L	FREEZE+ LAB UG/L
# OF SAMPLES	167	167	167	167	167	167	167.00
MAXIMUM	0.66	0.170	0.290	0.540	2.180	297.00	281.84
MINIMUM	0.00	0.000	0.000	0.000	0.000	12.30	0.02
ARITH. MEAN	0.11	0.024	0.040	0.068	0.217	61.40	36.53
ARITH. STD. DEV	0.12	0.028	0.047	0.084	0.307	52.57	48.31
GEOM. MEAN	0.09	0.020	0.028	0.044	0.110	47.91	36.53
1ST QUANTILE	0.02	0.005	0.010	0.016	0.030	28.12	7.47
2ND QUANTILE	0.08	0.015	0.025	0.040	0.126	46.60	21.64
3RD QUANTILE	0.16	0.035	0.050	0.092	0.288	77.67	47.86
VOL. WGT. MEAN	0.06	0.019	0.023	0.033	0.192	52.22	47.86
MISSING VALUES	77	83	84	83	74	79	79.00

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS

PERIOD OF REPORT : APR 14,88 TO DEC 31,88

# OF SAMPLES	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
114	114	79	60	91	91	91	82
MAXIMUM	38.2	89.0	5.8	7.4	0.2754	0.3220	14.20
MINIMUM	0.0	2.0	3.6	3.6	0.0000	0.0140	0.00
RANGE	38.2	87.0	2.3	3.8	0.2754	0.3080	14.20
ARITH. MEAN	5.0	25.1	4.3	4.7	0.0504	0.0779	2.54
ARITH. STD. DEV	7.8	21.5	0.4	0.8	0.0592	0.0686	2.53
GEOM. MEAN	1.7	16.8	4.3	4.6	0.0211	0.0376	1.74
1ST QUARTILE	0.5	8.3	4.3	4.2	0.0101	0.0319	0.77
2ND QUARTILE	2.0	20.3	4.3	4.5	0.0275	0.0350	1.80
3RD QUARTILE	5.5	31.5	4.5	4.9	0.0624	0.0893	3.75
VOL. WGT. MEAN	*****	23.9	*****	*****	0.0770	0.0766	2.51

# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
81	81	84	82	84	83	84	86
MAXIMUM	2.900	1.680	0.900	0.220	0.805	0.560	1.960
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	2.900	1.680	0.900	0.220	0.805	0.560	1.960
ARITH. MEAN	0.569	0.230	0.172	0.039	0.083	0.077	0.375
ARITH. STD. DEV	0.594	0.288	0.170	0.044	0.170	0.138	0.428
GEOM. MEAN	0.358	0.171	0.180	0.039	0.051	0.055	0.193
1ST QUARTILE	0.175	0.060	0.065	0.010	0.025	0.030	0.040
2ND QUARTILE	0.370	0.120	0.120	0.020	0.040	0.047	0.256
3RD QUARTILE	0.730	0.370	0.230	0.050	0.077	0.105	0.520
VOL. WGT. MEAN	0.490	0.157	0.124	0.027	0.041	0.053	0.342

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

PERIOD OF REPORT : JAN 13,88 TO DEC 28,88

# OF SAMPLES	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
120	99		70	107	107	107	104
MAXIMUM	69.0	88.5	7.4	7.9		0.3150	13.60
MINIMUM	0.1	1.5	3.0	3.6		0.0044	0.20
RANGE	68.9	87.0	4.4	4.4		0.3106	13.40
ARITH. MEAN	7.4	33.9	4.3	5.1		0.0727	4.00
ARITH. STD. DEV	10.7	20.7	0.9	1.3		0.0456	2.76
GEOM. MEAN	3.7	27.5	4.2	5.0		0.0548	3.02
1ST QUARTILE	1.6	17.0	3.8	4.2		0.0077	2.02
2ND QUARTILE	3.7	29.8	4.1	4.5		0.0285	3.27
3RD QUARTILE	9.1	46.5	4.5	6.0		0.1025	5.48
VOL. WGT. MEAN	*****	29.8	*****	*****		0.0646	3.41
						0.0776	

# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
104	93		106	93	94	94	107
MAXIMUM	4.490	5.120	3.850	0.985	1.040	1.510	3.400
MINIMUM	0.000	0.000	0.000	0.000	0.010	0.000	0.000
RANGE	4.490	5.120	3.850	0.985	1.030	1.510	3.400
ARITH. MEAN	0.862	0.843	0.436	0.152	0.163	0.156	0.354
ARITH. STD. DEV	0.709	0.897	0.540	0.180	0.175	0.206	0.716
GEOM. MEAN	0.627	0.531	0.315	0.098	0.086	0.098	0.660
1ST QUARTILE	0.370	0.240	0.150	0.035	0.062	0.067	0.496
2ND QUARTILE	0.630	0.570	0.280	0.092	0.092	0.095	0.266
3RD QUARTILE	1.230	0.950	0.460	0.163	0.165	0.177	0.500
VOL. WGT. MEAN	0.573	0.437	0.234	0.081	0.077	0.092	0.483
							0.501

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APROS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

PERIOD OF REPORT : JAN 3,88 TO DEC 30,88

	PRECIP.		CONDUCT.	PH FIELD	PH LAB	FREE H ⁺		TOTAL H ⁺	SULPHATE
	MM	MM	UMHO/CM			LAB	MG/L		
# OF SAMPLES	129		101	6.9	112	112	112	112	109
MAXIMUM	40.2		86.5	9.7	8.1	0.2884	0.2884	0.4180	17.30
MINIMUM	0.1		0.000	3.1	3.5	0.0000	0.0000	0.0000	0.00
RANGE	40.1		84.5	3.6	4.6	0.2884	0.2884	0.4180	17.30
ARITH. MEAN	5.1		34.8	4.3	4.9	0.0544	0.0544	0.0827	4.29
ARITH. STD. DEV	6.9		20.2	0.8	1.2	0.0568	0.0568	0.0671	3.06
GEOM. MEAN	2.3		28.6	4.2	4.8	0.0128	0.0128	0.0279	3.34
1ST QUARTILE	1.0		18.0	3.7	4.1	0.0079	0.0079	0.0296	2.07
2ND QUARTILE	2.2		29.8	4.1	4.4	0.0442	0.0442	0.0703	3.32
3RD QUARTILE	6.6		48.5	4.5	5.1	0.0776	0.0776	0.1180	5.88
VOL. WGT. MEAN	*****		30.9	*****	*****	0.0570	0.0570	0.0637	3.53
	NITRATE		CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM		SODIUM	AMMONIUM
	AS N	MG/L				MG/L	MG/L		AS N
# OF SAMPLES	109		100	109	100	99	99	99	111
MAXIMUM	3.130		4.360	1.500	0.930	0.885	0.885	0.875	3.250
MINIMUM	0.000		0.000	0.000	0.000	0.000	0.000	0.005	0.000
RANGE	3.130		4.360	1.500	0.930	0.885	0.885	0.870	3.250
ARITH. MEAN	0.884		0.745	0.356	0.130	0.108	0.108	0.130	0.752
ARITH. STD. DEV	0.631		0.771	0.296	0.149	0.105	0.105	0.157	0.617
GEOM. MEAN	0.664		0.430	0.173	0.086	0.063	0.063	0.077	0.535
1ST QUARTILE	0.385		0.160	0.195	0.030	0.025	0.025	0.042	0.306
2ND QUARTILE	0.745		0.400	0.265	0.080	0.057	0.057	0.075	0.590
3RD QUARTILE	1.270		1.130	0.465	0.175	0.118	0.118	0.135	0.903
VOL. WGT. MEAN	0.614		0.444	0.206	0.077	0.054	0.054	0.075	0.533

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APLOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHROVE/DAILY/AEROCHEM #07

PERIOD OF REPORT : DEC 31.87 TO DEC 31.88

	PRECIP.		CONDUCT.	PH FIELD	PH LAB	FREE H ⁺ LAB MG/L	TOTAL H ⁺ GRAN MG/L	SULPHATE MG/L
	MM	UMHO/CM						
# OF SAMPLES	135	110		63	120	120	120	115
MAXIMUM	30.4	93.0		7.1	7.5	0.0018	0.3560	11.30
MINIMUM	0.0	2.0		3.4	3.6	0.0000	0.0154	0.10
RANGE	30.4	91.0		3.5	4.0	0.2818	0.3406	11.20
ARITH. MEAN	5.1	24.1		4.6	4.8	0.0417	0.0677	2.39
ARITH. STD. DEV	6.0	18.5		0.7	0.9	0.0422	0.0491	2.03
GEOM. MEAN	2.3	17.2		4.5	4.7	0.0169	0.0541	1.66
1ST QUANTILE	0.9	9.0		4.2	4.2	0.0106	0.0308	0.05
2ND QUANTILE	2.8	19.5		4.3	4.5	0.0316	0.0544	1.08
3RD QUANTILE	7.0	34.0		4.8	5.0	0.0624	0.0924	3.27
VOL. WGT. MEAN	*****	24.0		*****	*****	0.0442	0.0711	2.46
	NITRATE AS N		CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
	MG/L	MG/L						
# OF SAMPLES	113	108		116	107	108	108	123
MAXIMUM	2.500	2.340		1.090	0.275	0.310	0.670	3.700
MINIMUM	0.030	0.000		0.000	0.000	0.010	0.005	0.006
RANGE	2.470	2.340		1.090	0.275	0.300	0.665	3.694
ARITH. MEAN	0.572	0.304		0.204	0.040	0.057	0.080	0.489
ARITH. STD. DEV	0.490	0.430		0.198	0.054	0.052	0.099	0.573
GEOM. MEAN	0.374	0.184		0.170	0.045	0.040	0.040	0.268
1ST QUANTILE	0.195	0.060		0.070	0.010	0.020	0.025	0.115
2ND QUANTILE	0.445	0.160		0.140	0.020	0.060	0.090	0.319
3RD QUANTILE	0.865	0.360		0.260	0.065	0.113	0.113	0.679
VOL. WGT. MEAN	0.482	0.208		0.147	0.029	0.039	0.050	0.414

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APLOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PERIOD OF REPORT : DEC 31,87 TO DEC 30,88

# OF SAMPLES	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H ⁺		TOTAL H ⁺		SULPHATE MG/L
					LAB MG/L	GRAN MG/L			
173	132	81	148	148	148	150	142	15.00	
MAXIMUM	38.4	82.0	6.3	7.8	0.4074	0.4010	0.4010	0.25	
MINIMUM	0.1	2.0	5.0	3.4	0.0000	0.0091	0.0091	14.75	
RANGE	38.3	80.0	3.3	4.4	0.4074	0.3919	0.3919	3.29	
ARITH. MEAN	5.2	24.9	4.2	5.2	0.0377	0.0620	0.0620	2.69	
ARITH. STD. DEV.	6.9	17.0	0.6	1.3	0.0561	0.0433	0.0433	2.30	
GEOM. MEAN	2.5	19.4	4.2	5.1	0.0057	0.0201	0.0201	1.47	
1ST QUARTILE	0.9	12.8	3.8	4.3	0.0002	0.0494	0.0494	2.45	
2ND QUARTILE	2.3	20.5	4.1	4.6	0.0232	0.0762	0.0762	4.42	
3RD QUARTILE	5.8	34.3	4.4	6.7	0.0408	0.0673	0.0673	2.90	
VOL. WGT. MEAN	*****	24.2	*****	*****	0.0424				

# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
142	138	142	138	138	137	138	151
MAXIMUM	2.750	4.180	1.410	0.815	1.100	0.750	2.120
MINIMUM	0.010	0.000	0.000	0.000	0.000	0.005	0.000
RANGE	2.740	4.180	1.410	0.815	1.100	0.745	2.120
ARITH. MEAN	0.648	0.643	0.235	0.129	0.052	0.090	0.606
ARITH. STD. DEV.	0.500	0.723	0.210	0.163	0.099	0.109	0.507
GEOM. MEAN	0.448	0.374	0.202	0.078	0.036	0.056	0.434
1ST QUARTILE	0.285	0.180	0.090	0.030	0.015	0.032	0.228
2ND QUARTILE	0.535	0.410	0.170	0.075	0.030	0.050	0.410
3RD QUARTILE	0.890	0.840	0.335	0.152	0.057	0.110	0.808
VOL. WGT. MEAN	0.512	0.392	0.197	0.080	0.036	0.072	0.493

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE

PERIOD OF REPORT : MAY 16,88 TO DEC 28,88

# OF SAMPLES	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
50	30.4	35	0	40	40	40	36
MAXIMUM	30.4	94.5	*****	5.6	0.2089	0.2280	7.85
MINIMUM	0.1	3.0	*****	3.7	0.0027	0.0129	0.50
RANGE	30.3	91.5	*****	1.9	0.2062	0.2151	7.35
ARITH. MEAN	7.1	28.8	*****	4.4	0.0587	0.0668	2.79
ARITH. STD. DEV	6.9	18.8	*****	0.4	0.0416	0.0497	1.69
GEOM. MEAN	2.6	23.4	*****	4.3	0.0431	0.0711	2.37
1ST QUANTILE	0.6	16.0	*****	4.1	0.0363	0.0549	1.52
2ND QUANTILE	3.0	24.8	*****	4.3	0.0562	0.0793	2.50
3RD QUANTILE	8.8	30.5	*****	4.4	0.0759	0.1055	3.38
VOL. WGT. MEAN	*****	24.5	*****	*****	0.0514	0.0728	2.58

# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
50	36	37	36	37	37	37	40
MAXIMUM	1.280	0.880	1.170	0.170	0.165	1.560	1.440
MINIMUM	0.070	0.000	0.000	0.000	0.000	0.005	0.020
RANGE	1.210	0.880	1.170	0.170	0.165	1.555	1.420
ARITH. MEAN	0.485	0.192	0.206	0.036	0.037	0.120	0.238
ARITH. STD. DEV	0.334	0.217	0.226	0.042	0.039	0.254	0.781
GEOM. MEAN	0.377	0.143	0.164	0.067	0.034	0.037	0.155
1ST QUANTILE	0.215	0.040	0.060	0.008	0.010	0.015	0.085
2ND QUANTILE	0.400	0.100	0.130	0.015	0.015	0.022	0.155
3RD QUANTILE	0.640	0.260	0.250	0.042	0.015	0.095	0.266
VOL. WGT. MEAN	0.337	0.092	0.109	0.016	0.016	0.037	0.189

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

PERIOD OF REPORT : JAN 7,88 TO DEC 28,88

# OF SAMPLES	PRECIP.	CONDUCT.	PH	PH	FREE H+	TOTAL H+	SULPHATE
	MM	UMHO/CM	FIELD	LAB	MG/L	GRAN	MG/L
84	68		0	69	69	69	68
MAXIMUM	140.0	62.0	*****	7.2	0.0871	0.1230	8.55
MINIMUM	0.1	1.0	*****	4.1	0.0001	0.0154	0.10
RANGE	139.9	61.0	*****	3.2	0.0870	0.1076	8.45
ARITH. MEAN	10.7	11.7	*****	5.3	0.0122	0.0333	1.43
ARITH. STD. DEV	16.5	11.0	*****	0.7	0.0167	0.0202	1.4
GEOM. MEAN	5.6	8.5	*****	5.3	0.0045	0.0295	0.99
1ST QUANTILE	3.7	6.0	*****	4.8	0.0014	0.0207	0.57
2ND QUANTILE	6.6	8.0	*****	5.2	0.0060	0.0268	0.95
3RD QUANTILE	12.3	14.5	*****	5.8	0.0150	0.0340	1.77
VOL. WGT. MEAN	*****	7.6	*****	*****	0.0008	0.0288	0.94

# OF SAMPLES	NITRATE	CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM
	AS N	MG/L	MG/L	MG/L	MG/L	MG/L	AS N
68	68		68	68	68	68	69
MAXIMUM	2.210	3.020	0.550	0.495	0.325	0.690	1.690
MINIMUM	0.020	0.000	0.000	0.000	0.000	0.000	0.022
RANGE	2.190	3.020	0.550	0.495	0.325	0.690	1.668
ARITH. MEAN	0.363	0.310	0.102	0.047	0.049	0.072	0.377
ARITH. STD. DEV	0.385	0.518	0.106	0.080	0.061	0.122	0.371
GEOM. MEAN	0.245	0.187	0.118	0.044	0.048	0.042	0.238
1ST QUANTILE	0.175	0.070	0.040	0.010	0.015	0.015	0.108
2ND QUANTILE	0.245	0.140	0.060	0.025	0.030	0.025	0.278
3RD QUANTILE	0.425	0.320	0.125	0.042	0.057	0.062	0.517
VOL. WGT. MEAN	0.222	0.169	0.057	0.025	0.031	0.039	0.254

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEN #10

PERIOD OF REPORT : JAN 8.88 TO DEC 29.88

# OF SAMPLES	PRECIP. PH	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H ⁺ LAB MG/L	TOTAL H ⁺ GRAM MG/L	SULPHATE MG/L
60	60	48	21	51	51	51	53
28.2	28.2	90.0	7.0	7.5	0.2884	0.3630	14.75
0.2	0.2	3.0	3.7	3.5	0.0000	0.0000	0.40
28.0	28.0	87.0	3.3	3.9	0.2884	0.3630	13.85
6.4	6.4	36.6	4.5	4.5	0.0683	0.1017	4.46
21.1	21.1	21.1	0.9	0.9	0.0618	0.0811	3.28
3.7	3.7	27.8	4.5	4.4	0.0311	0.0828	3.27
2.0	2.0	19.3	4.1	4.0	0.0343	0.0516	1.93
4.2	4.2	27.3	4.2	4.3	0.0513	0.0827	3.21
8.0	8.0	67.8	4.4	4.4	0.0873	0.1150	6.57
*****	*****	30.0	*****	*****	0.0565	0.0868	3.53
# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
53	53	50	53	50	51	51	50
3.220	3.220	4.500	2.320	0.865	0.420	1.710	1.690
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.084
3.220	3.220	4.500	2.320	0.865	0.420	1.710	1.686
0.901	0.743	0.743	0.578	0.103	0.077	0.126	0.632
0.728	0.857	0.857	0.428	0.145	0.091	0.256	0.455
0.667	0.489	0.489	0.192	0.062	0.056	0.078	0.474
0.330	0.210	0.210	0.090	0.025	0.017	0.030	0.250
0.715	0.480	0.480	0.145	0.065	0.045	0.095	0.453
1.225	0.870	0.870	0.300	0.103	0.045	0.105	0.983
0.452	0.452	0.452	0.206	0.058	0.048	0.087	0.488

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

PERIOD OF REPORT : DEC 31,87 TO DEC 31,88

# OF SAMPLES	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GUAN MG/L	SULPHATE MG/L
MAXIMUM	167	132	71	137	137	137	136
MINIMUM	40.0	90.5	6.9	7.8	0.4169	0.5140	12.40
RANGE	0.0	0.5	7.8	3.4	0.0000	0.0117	0.00
ARITH. MEAN	40.0	90.0	5.1	4.4	0.4169	0.5023	12.40
ARITH. STD. DEV	4.6	26.2	4.5	4.9	0.0468	0.0724	2.62
GEOM. MEAN	6.0	20.2	0.6	1.0	0.0600	0.0710	2.28
1ST QUANTILE	2.1	18.4	4.5	4.8	0.0132	0.0521	1.84
2ND QUANTILE	0.8	10.0	4.2	4.2	0.0048	0.0247	1.00
3RD QUANTILE	2.0	22.0	4.4	4.5	0.0279	0.0520	1.95
VOL. WGT. MEAN	6.1	36.8	4.7	5.3	0.0603	0.0927	3.42
	*****	28.1	*****	*****	0.0469	0.0747	2.88

# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
MAXIMUM	134	124	137	124	123	124	140
MINIMUM	2.630	3.440	1.720	0.430	0.445	1.310	1.980
RANGE	0.020	0.000	0.000	0.000	0.000	0.000	0.004
ARITH. MEAN	2.610	3.640	1.720	0.430	0.445	1.310	1.976
ARITH. STD. DEV	0.615	0.523	0.221	0.057	0.046	0.085	0.435
GEOM. MEAN	0.525	0.674	0.264	0.074	0.064	0.150	0.458
1ST QUANTILE	0.395	0.312	0.157	0.042	0.034	0.054	0.229
2ND QUANTILE	0.205	0.120	0.065	0.010	0.010	0.007	0.138
3RD QUANTILE	0.490	0.260	0.140	0.035	0.075	0.077	0.256
VOL. WGT. MEAN	0.855	0.620	0.275	0.067	0.050	0.100	0.583
	0.518	0.352	0.132	0.044	0.028	0.045	0.435

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/DAILY/AERO/CHEM./7011
PERIOD OF REPORT : DEC 31,87 TO APR 26,88

	PRECIP.		CONDUCT.		PH		FREE H+		TOTAL H+		SULPHATE	
	MM	UH/O/CH			FIELD	LAB	LAB	MG/L	GRAN	MG/L	MG/L	MG/L
# OF SAMPLES	76	40			0	36	36	37	37	41		
MAXIMUM	20.2	91.0			*****	7.2	0.2512	0.3070	0.3070	9.10		
MINIMUM	0.1	3.0			*****	3.6	0.0001	0.0149	0.0149	0.10		
RANGE	20.1	88.0			*****	3.6	0.2511	0.2921	0.2921	9.00		
ARITH. MEAN	3.4	26.8			*****	4.6	0.0528	0.0792	0.0792	2.04		
ARITH. STD. DEV	4.7	20.2			*****	0.8	0.0484	0.0565	0.0565	1.97		
GEOM. MEAN	1.1	19.7			*****	4.5	0.0270	0.0636	0.0636	1.33		
1ST QUARTILE	0.2	11.5			*****	4.2	0.0272	0.0644	0.0644	0.72		
2ND QUARTILE	1.3	23.0			*****	4.4	0.0300	0.0657	0.0657	1.68		
3RD QUARTILE	4.9	30.8			*****	4.6	0.0661	0.1050	0.1050	2.40		
VOL. WGT. MEAN	*****	23.3			*****	*****	0.0466	0.0682	0.0682	1.71		

	NITRATE		CALCIUM		CHLORIDE		MAGNESIUM		POTASSIUM		AMMONIUM	
	AS N	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	AS N	MG/L	MG/L
# OF SAMPLES	41	29			41	29	29	29	29	40		
MAXIMUM	3.100	1.900			1.480	0.365	0.000	0.100	0.500	2.000		
MINIMUM	0.020	0.000			0.020	0.000	0.000	0.000	0.000	0.000		
RANGE	3.080	1.900			1.460	0.365	0.000	0.100	0.500	2.000		
ARITH. MEAN	0.738	0.254			0.219	0.031	0.018	0.018	0.084	0.304		
ARITH. STD. DEV	0.724	0.404			0.278	0.070	0.023	0.023	0.111	0.397		
GEOM. MEAN	0.461	0.189			0.124	0.083	0.000	0.025	0.068	0.158		
1ST QUARTILE	0.270	0.030			0.055	0.000	0.005	0.025	0.025	0.042		
2ND QUARTILE	0.485	0.120			0.140	0.010	0.010	0.040	0.040	0.210		
3RD QUARTILE	0.960	0.250			0.225	0.027	0.017	0.070	0.070	0.355		
VOL. WGT. MEAN	0.518	0.132			0.118	0.014	0.012	0.062	0.062	0.244		

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM 804

PERIOD OF REPORT : JAN 1,88 TO DEC 30,88

# OF SAMPLES	PRECIP. PH	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H ⁺ LAB MG/L	TOTAL H ⁺ GRAN MG/L	SULPHATE MG/L
161	122	73	135	135	135	135	131
MAXIMUM	44.9	84.0	6.6	7.6	0.4169	0.4040	18.00
MINIMUM	0.1	3.0	3.1	3.4	0.0000	0.0081	0.20
RANGE	44.8	81.0	3.5	4.3	0.4168	0.3959	17.00
ARITH. MEAN	5.1	28.7	4.4	5.2	0.0610	0.0660	3.69
ARITH. STD. DEV	6.7	19.3	0.8	1.2	0.0615	0.0630	3.04
GEOM. MEAN	2.5	22.8	4.3	5.1	0.0065	0.0468	2.68
1ST QUARTILE	1.1	13.0	3.8	4.2	0.0003	0.0227	1.65
2ND QUARTILE	2.9	23.8	4.2	4.7	0.0204	0.0457	2.57
3RD QUARTILE	6.0	37.0	4.6	6.4	0.0917	0.0915	4.92
VOL. WGT. MEAN	*****	26.6	*****	*****	0.0432	0.0675	3.18
# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
131	115	130	115	115	116	115	133
MAXIMUM	3.200	4.300	1.140	0.910	0.520	0.580	3.900
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.030
RANGE	3.200	4.300	1.140	0.910	0.520	0.580	3.870
ARITH. MEAN	0.689	0.671	0.266	0.138	0.046	0.083	0.807
ARITH. STD. DEV	0.576	0.772	0.231	0.171	0.065	0.095	0.697
GEOM. MEAN	0.468	0.368	0.188	0.077	0.041	0.079	0.579
1ST QUARTILE	0.285	0.150	0.080	0.025	0.015	0.027	0.330
2ND QUARTILE	0.355	0.350	0.180	0.067	0.025	0.045	0.550
3RD QUARTILE	0.695	0.900	0.330	0.197	0.052	0.110	1.095
VOL. WGT. MEAN	0.508	0.427	0.185	0.087	0.031	0.063	0.574

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
 APTOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
 SUMMARY STATISTICS OF CONCENTRATION

STATION -WILMER AEROCHEM SITE NO. 1

	EQUIVALENT PREC. DEPTH MM	CONDUCT UMHO/CM	FIELD PH	LAB PH	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
# OF SAMPLES :	180.0	180	180	180	180	180	180
MAXIMUM :	32.4	94.00	5.390	7.64	16.50	3.45	4.42
MINIMUM :	0.2	2.00	3.900	3.59	0.20	0.05	0.00
ARITH. MEAN :	4.3	30.56	4.432	4.54	3.04	0.73	0.45
ARITH. STD. DEV :	5.4	22.02	0.399	0.73	2.67	0.61	0.64
GEOM. MEAN :	4.3	22.23	4.056	4.49	2.03	0.51	0.25
1ST QUARTILE :	0.4	12.25	4.095	4.11	1.00	0.29	0.10
2ND QUARTILE :	2.2	26.50	4.450	4.31	2.35	0.56	0.24
3RD QUARTILE :	6.4	42.00	4.690	4.76	4.04	1.01	0.57
VOL. WGT. MEAN :	0.4	25.86	4.426	4.51	2.47	0.55	0.28
MISSING VALUES :	2.0	60	167	58	56	57	60

	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	ACIDITY GRAN UG/L	FREEH+ LAB UG/L
# OF SAMPLES :	180	180	180	180	180	180	180.00
MAXIMUM :	1.69	1.070	0.340	0.685	1.810	335.00	257.04
MINIMUM :	0.00	0.000	0.000	0.000	0.000	15.30	0.02
ARITH. MEAN :	0.26	0.066	0.042	0.102	0.420	87.03	57.62
ARITH. STD. DEV :	0.32	0.120	0.052	0.134	0.403	64.85	52.78
GEOM. MEAN :	0.16	0.037	0.031	0.057	0.281	67.50	57.62
1ST QUARTILE :	0.05	0.010	0.015	0.025	0.148	40.87	17.28
2ND QUARTILE :	0.14	0.035	0.027	0.045	0.300	74.30	48.98
3RD QUARTILE :	0.31	0.074	0.045	0.110	0.479	110.25	78.08
VOL. WGT. MEAN :	0.16	0.040	0.026	0.067	0.314	74.66	58.00
MISSING VALUES :	55	60	60	60	56	58	

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PART IV

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY REGION

PERIOD OF REPORT : DEC 31,87 TO DEC 31,88

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM AS N MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	558	518	565	517	518	518	580
MAXIMUM	4.200	5.500	10.860	0.700	0.885	1.310	3.700
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	4.200	5.500	10.860	0.700	0.885	1.310	3.700
ARITH. MEAN	0.617	0.422	0.244	0.051	0.049	0.092	0.407
ARITH. STD. DEV	0.535	0.579	0.579	0.070	0.075	0.135	0.446
GEOM. MEAN	0.411	0.250	0.166	0.043	0.036	0.055	0.221
1ST QUARTILE	0.205	0.060	0.070	0.010	0.015	0.025	0.101
2ND QUARTILE	0.400	0.200	0.130	0.025	0.070	0.045	0.270
3RD QUARTILE	0.915	0.530	0.295	0.060	0.055	0.110	0.543
VOL. WGT. MEAN	0.520	0.292	0.156	0.038	0.032	0.058	0.391

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHEASTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : APR 11,88 TO DEC 31,88

# OF SAMPLES	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H ⁺ LAB MG/L	TOTAL H ⁺ GRAN MG/L	SULPHATE MG/L
MAXIMUM	262	167	127	179	179	179	171
MINIMUM	140.0	89.0	5.8	7.6	0.2818	0.3520	31.40
RANGE	0.0	1.0	1.6	3.6	0.0000	0.0123	0.00
ARITH. MEAN	140.0	88.0	2.3	4.1	0.2818	0.3097	31.40
ARITH. STD. DEV	5.8	21.1	4.4	4.7	0.0436	0.0698	2.32
GEOM. MEAN	15.1	19.5	0.4	0.7	0.0544	0.0617	3.14
1ST QUANTILE	1.2	13.6	4.4	4.7	0.0189	0.0526	1.39
2ND QUANTILE	0.3	5.8	4.1	4.3	0.0091	0.0294	0.60
3RD QUANTILE	1.4	15.3	4.3	4.6	0.0254	0.0510	1.50
VOL. WGT. MEAN	5.4	28.8	4.6	5.0	0.0531	0.0808	2.85
	*****	16.6	*****	*****	0.0331	0.0579	1.69

# OF SAMPLES	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
MAXIMUM	170	168	172	168	166	168	179
MINIMUM	2.900	1.680	0.900	0.220	0.005	0.540	2.180
RANGE	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ARITH. MEAN	2.900	1.680	0.900	0.220	0.805	0.540	2.180
ARITH. STD. DEV	0.450	0.192	0.161	0.031	0.061	0.073	0.293
GEOM. MEAN	0.516	0.235	0.167	0.038	0.105	0.078	0.377
1ST QUANTILE	0.282	0.163	0.149	0.041	0.044	0.054	0.152
2ND QUANTILE	0.085	0.040	0.040	0.010	0.017	0.025	0.036
3RD QUANTILE	0.300	0.120	0.100	0.020	0.035	0.045	0.160
VOL. WGT. MEAN	0.595	0.280	0.185	0.040	0.055	0.095	0.396
	0.323	0.127	0.076	0.021	0.029	0.041	0.230

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APLOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JAN 1,88 TO DEC 30,88

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L
# OF SAMPLES	341	256	0	254	254	254	260
MAXIMUM	140.0	95.5	*****	7.4	0.0871	0.1230	8.55
MINIMUM	0.1	0.5	*****	4.1	0.0000	0.0103	0.00
RANGE	139.9	95.0	*****	3.3	0.0871	0.1127	8.55
ARITH. MEAN	7.5	10.9	*****	5.4	0.0111	0.0311	1.31
ARITH. STD. DEV	11.5	10.6	*****	0.8	0.0156	0.0190	1.40
GEOM. MEAN	2.9	7.8	*****	5.4	0.0036	0.0273	0.87
1ST QUANTILE	1.1	5.0	*****	4.8	0.0009	0.0196	0.45
2ND QUANTILE	4.3	8.0	*****	5.3	0.0054	0.0241	0.90
3RD QUANTILE	9.3	13.3	*****	6.0	0.0141	0.0351	1.63
VOL. MGT. MEAN	*****	8.4	*****	*****	0.0092	0.0288	1.06
	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	260	253	260	253	253	252	268
MAXIMUM	2.210	3.020	3.730	0.495	0.325	1.630	4.130
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	2.210	3.020	3.730	0.495	0.325	1.630	4.130
ARITH. MEAN	0.332	0.279	0.115	0.043	0.046	0.084	0.340
ARITH. STD. DEV	0.316	0.409	0.253	0.065	0.055	0.198	0.417
GEOM. MEAN	0.233	0.215	0.129	0.042	0.042	0.069	0.196
1ST QUANTILE	0.145	0.060	0.040	0.010	0.015	0.015	0.090
2ND QUANTILE	0.250	0.140	0.070	0.025	0.030	0.030	0.240
3RD QUANTILE	0.415	0.300	0.130	0.045	0.045	0.045	0.423
VOL. MGT. MEAN	0.241	0.196	0.066	0.029	0.036	0.045	0.280

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIDS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JAN 4,88 TO DEC 31,88

	PRECIP.		CONDUCT.	PH FIELD	PH LAB	FREE H ⁺		TOTAL H ⁺ GRAN	SULPHATE
	MM	MM	UMHO/CM			LAB	MG/L		
# OF SAMPLES	: 342		259	67	266	266		266	272
MAXIMUM	: 113.8		94.5	7.0	7.6	0.2884		0.3800	16.50
MINIMUM	: 0.2		2.0	5.6	3.5	0.0000		0.0000	0.00
RANGE	: 113.6		92.5	3.4	4.1	0.2884		0.3800	16.50
ARITH. MEAN	: 5.8		31.7	4.4	4.5	0.0623		0.0927	3.42
ARITH. STD. DEV	: 8.8		22.0	0.6	0.7	0.0565		0.0701	2.86
GEOM. MEAN	: 2.6		23.7	4.4	4.4	0.0523		0.0728	2.33
1ST QUARTILE	: 0.8		15.8	4.1	4.1	0.0232		0.0632	1.40
2ND QUARTILE	: 3.0		26.3	4.5	4.3	0.0695		0.0750	2.55
3RD QUARTILE	: 7.9		44.8	4.6	4.6	0.0813		0.1160	4.72
VOL. WGT. MEAN	: *****		24.9	*****	*****	0.0660		0.0744	2.62
	NITRATE		CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM		SODIUM	AMMONIUM
	AS N	MG/L				MG/L	MG/L		AS N
# OF SAMPLES	: 271		261	273	261	262		262	268
MAXIMUM	: 3.460		4.500	2.320	1.070	0.420		1.710	1.810
MINIMUM	: 0.000		0.000	0.000	0.000	0.000		0.000	0.000
RANGE	: 3.460		4.500	2.320	1.070	0.420		1.710	1.810
ARITH. MEAN	: 0.774		0.487	0.277	0.074	0.067		0.103	0.455
ARITH. STD. DEV	: 0.649		0.659	0.349	0.120	0.060		0.164	0.402
GEOM. MEAN	: 0.542		0.280	0.197	0.054	0.038		0.063	0.312
1ST QUARTILE	: 0.320		0.100	0.060	0.015	0.015		0.025	0.190
2ND QUARTILE	: 0.590		0.260	0.150	0.040	0.027		0.045	0.320
3RD QUARTILE	: 1.115		0.580	0.320	0.082	0.050		0.108	0.565
VOL. WGT. MEAN	: 0.507		0.268	0.170	0.039	0.027		0.057	0.334

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JAN 13,88 TO DEC 31,88

	PRECIP. MM	CONDUCT. UNHO/CM	PH FIELD	PH LAB	FREE H ⁺ LAB HG/L	TOTAL H ⁺ GRAN HG/L	SULPHATE HG/L
# OF SAMPLES	602	462	293	515	515	516	495
MAXIMUM	69.0	88.5	7.4	8.1	0.4169	0.4180	18.00
MINIMUM	0.1	1.5	3.0	3.4	0.0000	0.0000	0.00
RANGE	68.9	87.0	4.4	4.7	0.4169	0.4180	18.00
ARITH. MEAN	5.5	29.8	4.3	5.1	0.0434	0.0626	3.72
GEOM. STD. DEV	7.8	19.6	0.8	1.2	0.0571	0.0494	2.95
GEOM. MEAN	2.6	23.4	4.2	5.0	0.0076	0.0230	2.69
1ST QUARTILE	1.0	15.0	3.8	4.2	0.0010	0.0515	1.70
2ND QUARTILE	2.6	24.3	4.1	4.6	0.0279	0.0925	2.85
3RD QUARTILE	6.6	40.5	4.5	*****	0.0631	5.10	5.10
VOL. WGT. MEAN	*****	27.5	*****	*****	0.0477	0.0731	3.21
	NITRATE AS N HG/L	CALCIUM HG/L	CHLORIDE HG/L	MAGNESIUM HG/L	POTASSIUM HG/L	SODIUM HG/L	AMMONIUM AS N HG/L
# OF SAMPLES	495	455	496	455	453	455	510
MAXIMUM	4.490	5.120	3.850	0.985	1.100	1.510	3.900
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	4.490	5.120	3.850	0.985	1.100	1.510	3.900
ARITH. MEAN	0.750	0.710	0.308	0.135	0.077	0.114	0.705
GEOM. STD. DEV	0.604	0.782	0.339	0.165	0.119	0.150	0.622
GEOM. MEAN	0.552	0.416	0.233	0.082	0.050	0.071	0.491
1ST QUARTILE	0.305	0.180	0.110	0.030	0.020	0.035	0.276
2ND QUARTILE	0.590	0.460	0.220	0.080	0.040	0.060	0.693
3RD QUARTILE	1.035	0.950	0.395	0.168	0.085	0.135	0.926
VOL. WGT. MEAN	0.546	0.422	0.206	0.081	0.049	0.076	0.520

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

PART V

SUMMARY STATISTICS OF WET DEPOSITION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

PERIOD OF REPORT : JAN 3, 88 TO DEC 29, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD HG/MM#2	FREE H+ LAB HG/MM#2	TOTAL H+ GRAN HG/MM#2	SULPHATE HG/MM#2	NITRATE AS N HG/MM#2	CALCIUM HG/MM#2
128	128	77	125	125	124	122	116
MAXIMUM	: 72.0	5.2048	4.3292	5.7147	307.80	29.520	27.500
MINIMUM	: 0.1	0.0001	0.0000	0.0000	0.0012	0.000	0.012
RANGE	: 71.9	5.2047	4.3292	5.7135	307.80	29.520	27.488
ARITH. MEAN	: 5.9	0.4619	0.2967	0.4624	18.37	3.534	2.719
GEOM. MEAN	: 6.8	0.6050	0.6050	0.6050	40.23	5.113	4.389
ARITH. STD. DEV	: 2.7	0.1583	0.0334	0.1460	5.49	1.396	1.096
GEOM. STD. DEV	: 1.1	0.0815	0.0059	0.0517	1.97	0.477	0.465
1ST QUANTILE	: 3.3	0.2243	0.0789	0.1489	7.18	1.547	1.372
2ND QUANTILE	: 7.2	0.4619	0.2940	0.4646	17.81	4.111	2.644
3RD QUANTILE	: 7.2	0.4619	0.2940	0.4646	17.81	4.111	2.644
VOL. WGT. MEAN	: *****	0.3475	0.2895	0.4520	17.82	3.375	2.497

CHLORIDE
HG/MM#2

SODIUM
HG/MM#2

POTASSIUM
HG/MM#2

MAGNESIUM
HG/MM#2

AMMONIUM
AS N
HG/MM#2

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD HG/MM#2	FREE H+ LAB HG/MM#2	TOTAL H+ GRAN HG/MM#2	SULPHATE HG/MM#2	NITRATE AS N HG/MM#2	CALCIUM HG/MM#2
124	124	116	115	115	122	122	116
MAXIMUM	: 15.120	4.902	7.200	7.200	35.112	35.112	27.500
MINIMUM	: 0.000	0.000	0.000	0.000	0.000	0.000	0.012
RANGE	: 15.120	4.902	7.191	7.191	35.112	35.112	27.488
ARITH. MEAN	: 0.998	0.333	0.402	0.402	2.539	2.539	2.719
GEOM. MEAN	: 1.852	0.649	0.333	0.333	4.638	4.638	4.389
ARITH. STD. DEV	: 0.411	0.133	0.108	0.108	0.711	0.711	1.096
GEOM. STD. DEV	: 0.155	0.039	0.094	0.094	0.267	0.267	0.465
1ST QUANTILE	: 0.432	0.126	0.118	0.118	0.920	0.920	1.372
2ND QUANTILE	: 0.865	0.309	0.262	0.262	2.526	2.526	2.644
3RD QUANTILE	: 0.968	0.305	0.201	0.201	2.431	2.431	2.497
VOL. WGT. MEAN	: 0.968	0.305	0.201	0.201	2.431	2.431	2.497

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

PERIOD OF REPORT : JAN 4, 88 TO DEC 29, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD MG/H#*2	FREE H+ LAB MG/H#*2	TOTAL H+ GRAN MG/H#*2	SULPHATE MG/H#*2	NITRATE AS N MG/H#*2	CALCIUM MG/H#*2
104	33	1.8132	0.0000	93	95	95	91
MAXIMUM	38.6	1.8132	0.0000	2.8139	121.42	12.032	9.504
MINIMUM	0.2	0.0328	0.0000	0.0033	0.00	0.024	0.000
RANGE	38.4	1.7805	0.0000	2.8107	121.42	12.008	9.504
ARITH. MEAN	7.2	0.4390	0.3512	0.5640	18.75	3.228	1.593
ARITH. STD. DEV	8.2	0.3906	0.4019	0.5473	22.90	2.695	2.085
GEOM. MEAN	3.7	0.2975	0.1609	0.3136	9.29	2.117	0.879
1ST QUANTILE	1.6	0.1727	0.0946	0.1820	4.41	1.354	0.333
2ND QUANTILE	4.4	0.3742	0.2265	0.3633	11.10	2.511	0.788
3RD QUANTILE	9.2	0.5361	0.4641	0.6820	22.45	4.218	1.776
VOL. WGT. MEAN	*****	0.3838	0.3264	0.5056	17.76	3.057	1.456

# OF SAMPLES	CHLORIDE MG/H#*2	MAGNESIUM MG/H#*2	POTASSIUM MG/H#*2	SODIUM MG/H#*2	AMMONIUM AS N MG/H#*2
95	91	91	94	94	94
MAXIMUM	36.750	1.575	1.122	1.351	14.213
MINIMUM	0.000	0.000	0.000	0.000	0.008
RANGE	36.750	1.575	1.122	1.351	14.205
ARITH. MEAN	1.360	0.269	0.183	0.320	2.352
ARITH. STD. DEV	3.718	0.350	0.216	0.362	2.715
GEOM. MEAN	0.673	0.186	0.119	0.216	1.150
1ST QUANTILE	0.222	0.044	0.038	0.087	0.725
2ND QUANTILE	0.528	0.145	0.098	0.178	1.346
3RD QUANTILE	1.300	0.321	0.206	0.333	2.895
VOL. WGT. MEAN	1.269	0.246	0.168	0.293	2.209

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS:
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131

PERIOD OF REPORT : DEC 31, 87 TO DEC 30, 88

# OF SAMPLES	PRECIP. PH	FREE H+ FIELD MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
MAXIMUM	104	0	77	77	78	78	79
MINIMUM	46.6	*****	0.5074	1.1642	126.86	19.488	30.240
RANGE	0.1	*****	0.0000	0.0043	0.00	0.000	0.000
ARITH. MEAN	46.5	*****	0.5073	1.1600	126.84	19.408	30.240
GEOM. MEAN	7.4	*****	0.1026	0.2873	12.32	2.525	4.573
1ST QUANTILE	6.0	*****	0.1297	0.2595	17.44	2.801	4.573
2ND QUANTILE	3.6	*****	0.0354	0.1646	5.82	1.400	1.176
3RD QUANTILE	2.0	*****	0.0161	0.1025	3.06	0.634	0.210
VOL. WGT. MEAN	5.2	*****	0.0415	0.2027	6.76	1.949	1.020
	9	*****	0.1380	0.3510	15.08	3.282	2.460
	*****	*****	0.0859	0.2404	10.17	2.086	2.093

CHLORIDE
MG/HMM2

POTASSIUM
MG/HMM2

SODIUM
MG/HMM2

AMMONIUM
AS N
MG/HMM2

# OF SAMPLES	78	79	79	78	79
MAXIMUM	11.936	3.192	0.292	6.384	22.176
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	11.936	3.192	0.292	6.384	22.176
ARITH. MEAN	0.834	0.360	0.415	0.636	2.783
GEOM. MEAN	1.957	0.590	0.723	1.081	3.700
1ST QUANTILE	0.636	0.237	0.228	0.317	1.275
2ND QUANTILE	0.106	0.031	0.051	0.091	0.477
3RD QUANTILE	0.540	0.125	0.184	0.299	1.611
VOL. WGT. MEAN	0.845	0.351	0.416	0.588	3.328
	0.689	0.298	0.344	0.522	2.305

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08

PERIOD OF REPORT : DEC 31, 87 TO DEC 31, 88

	PRECIP. MM	FREE H+ FIELD MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
# OF SAMPLES	218	119	193	194	189	189	170
MAXIMUM	32.4	3.3121	4.0748	3.7184	136.95	15.180	15.062
MINIMUM	0.0	0.0011	0.0001	0.0022	0.00	0.000	0.000
RANGE	32.4	3.3110	4.0747	3.7162	136.95	15.180	15.062
ARITH. MEAN	4.7	0.4057	0.2534	0.3798	12.50	2.734	1.246
ARITH. STD. DEV	5.9	0.4235	0.4088	0.4933	17.83	3.200	2.130
GEOM. MEAN	1.8	0.2438	0.0649	0.1506	4.13	1.119	0.610
1ST QUANTILE	0.6	0.1324	0.0182	0.0493	1.50	0.309	0.194
2ND QUANTILE	2.2	0.2891	0.1091	0.1909	5.66	1.660	0.524
3RD QUANTILE	6.6	0.5704	0.3475	0.5215	16.95	3.968	1.434
VOL. WGT. MEAN	*****	0.2838	0.2264	0.3404	10.93	2.391	0.968

	CHLORIDE MG/HMM2	MAGNESIUM MG/HMM2	POTASSIUM MG/HMM2	SODIUM MG/HMM2	AMMONIUM AS N MG/HMM2
# OF SAMPLES	188	170	171	171	145
MAXIMUM	10.092	2.484	1.530	6.072	15.318
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	10.092	2.484	1.530	6.072	15.318
ARITH. MEAN	0.926	0.183	0.169	0.414	1.720
ARITH. STD. DEV	1.435	0.311	0.226	0.740	2.576
GEOM. MEAN	0.433	0.118	0.107	0.201	0.666
1ST QUANTILE	0.090	0.024	0.031	0.057	0.072
2ND QUANTILE	0.390	0.075	0.079	0.188	0.717
3RD QUANTILE	1.187	0.203	0.226	0.445	2.204
VOL. WGT. MEAN	0.806	0.145	0.134	0.330	1.545

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EGBERT

PERIOD OF REPORT : NOV 29, 88 TO DEC 31, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
19	7.8	0	13	12	9	9	9
MAXIMUM	7.8	*****	0.3327	0.4781	15.24	2.262	1.560
MINIMUM	0.2	*****	0.0006	0.0051	0.05	0.098	0.080
RANGE	7.6	*****	0.3322	0.4731	15.24	2.164	1.500
ARITH. MEAN	1.6	*****	0.0518	0.0975	3.06	0.757	0.752
ARITH. STD. DEV	2.3	*****	0.0925	0.1370	4.84	0.825	0.552
GEOM. MEAN	0.9	*****	0.0152	0.0471	1.01	0.247	0.529
1ST QUANTILE	0.4	*****	0.0046	0.0240	0.29	0.266	0.266
2ND QUANTILE	0.6	*****	0.0155	0.0431	0.79	0.366	0.582
3RD QUANTILE	1.1	*****	0.0376	0.1036	2.81	0.535	0.992
VOL. WGT. MEAN	*****	*****	0.0387	0.0697	1.76	0.435	0.428

# OF SAMPLES	CHLORIDE MG/HMM2	MAGNESIUM MG/HMM2	POTASSIUM MG/HMM2	SODIUM MG/HMM2	AMMONIUM AS N MG/HMM2
9	9	9	9	9	8
MAXIMUM	2.184	0.330	0.160	0.935	0.998
MINIMUM	0.000	0.010	0.005	0.017	0.066
RANGE	2.184	0.320	0.154	0.918	0.932
ARITH. MEAN	0.789	0.124	0.054	0.408	0.261
ARITH. STD. DEV	0.813	0.122	0.059	0.314	0.307
GEOM. MEAN	0.475	0.074	0.028	0.314	0.176
1ST QUANTILE	0.053	0.031	0.009	0.214	0.092
2ND QUANTILE	0.414	0.075	0.015	0.428	0.167
3RD QUANTILE	1.165	0.121	0.080	0.673	0.253
VOL. WGT. MEAN	0.454	0.070	0.031	0.277	0.134

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION
(SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEN #16

PERIOD OF REPORT : JAN 1, 88 TO DEC 31, 88

	PRECIP. MM	FREE H+ MG/H**2	FREE H+ LBS MG/H**2	TOTAL H+ GRAM MG/H**2	SULPHATE MG/H**2	NITRATE AS N MG/H**2	CALCIUM MG/H**2
# OF SAMPLES	153	0	108	108	114	114	106
MAXIMUM	69.2	*****	1.2866	2.2131	83.65	14.532	9.688
MINIMUM	0.1	*****	0.0000	0.0010	0.00	0.000	0.000
RANGE	69.1	*****	1.2865	2.2121	83.65	14.532	9.688
ARITH. MEAN	5.8	*****	0.0597	0.2035	6.91	1.697	1.204
GEOM. STD. DEV	9.9	*****	0.1430	0.3029	11.74	2.146	1.868
GEOM. MEAN	1.7	*****	0.0079	0.0834	2.31	0.677	0.624
1ST QUARTILE	0.5	*****	0.0014	0.0424	0.66	0.217	0.066
2ND QUARTILE	2.3	*****	0.0118	0.0904	3.18	0.926	0.515
3RD QUARTILE	6.4	*****	0.0682	0.2708	9.12	2.365	1.496
VOL. WGT. MEAN	*****	*****	0.0442	0.1507	5.37	1.318	0.876

AMMONIUM
AS N

SODIUM

POTASSIUM

MAGNESIUM

CHLORIDE

OF SAMPLES

MAXIMUM

MINIMUM

RANGE

ARITH. MEAN

GEOM. STD. DEV

GEOM. MEAN

1ST QUARTILE

2ND QUARTILE

3RD QUARTILE

VOL. WGT. MEAN

***** : INSUFFICIENT DATA

NOTE(1) : PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2) : THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
APLOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF DEPOSITION

STATION=GORGANDA AEROCHEM SITE NO.1

PREC. DEPTH MM	EQUIVALENT PREC. DEPTH MM	SULFATE		NITRATE		CALCIUM		CHLORIDE		MAGNESIUM	
		MG/M**2	167	MG/M**2	167	MG/M**2	167	MG/M**2	167	MG/M**2	167
# OF SAMPLES	:		167.0		8.51		9.58		2.13		1.620
MAXIMUM	:		37.0		89.11		0.00		0.00		0.000
MINIMUM	:		0.0		0.02		0.00		0.00		0.000
ARITH. MEAN	:		4.2		9.02		0.72		0.34		0.112
ARITH. STD. DEV	:		6.2		13.05		1.52		0.41		0.254
GEOM. MEAN	:		1.1		3.23		0.30		0.22		0.048
1ST QUARTILE	:		0.2		0.90		0.06		0.04		0.005
2ND QUARTILE	:		1.3		5.09		0.20		0.21		0.026
3RD QUARTILE	:		5.8		12.72		0.68		0.46		0.107
VOL. WGT. MEAN	:				5.13		0.41		0.19		0.063
MISSING VALUES	:		32.0		79		83		78		83

FREEH+
LAB

ACIDITY GRAN

AMMONIUM

SODIUM

POTASSIUM

MG/M**2

MG/M**2

MG/M**2

MG/M**2

MG/M**2

# OF SAMPLES	:		167		167		167		167.00		1083.6
MAXIMUM	:		1.144		1.080		9.576		1758.26		2.86
MINIMUM	:		0.000		0.000		0.000		308.52		171.56
ARITH. MEAN	:		0.136		0.195		0.974		342.00		217.53
ARITH. STD. DEV	:		0.200		0.232		1.561		131.35		45.71
GEOM. MEAN	:		0.079		0.125		0.271		36.48		7.50
1ST QUARTILE	:		0.024		0.052		0.066		193.44		74.84
2ND QUARTILE	:		0.076		0.106		0.205		456.00		245.21
3RD QUARTILE	:		0.162		0.235		1.346		175.31		67.01
VOL. WGT. MEAN	:		0.077		0.110		0.644		80		80.00
MISSING VALUES	:		84		83		75				

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS

PERIOD OF REPORT : APR 14, 88 TO DEC 31, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD MG/H**2	FREE H+ LAB MG/H**2	TOTAL H+ GRAN MG/H**2	SULPHATE MG/H**2	NITRATE AS N MG/H**2	CALCIUM MG/H**2
MAXIMUM	114	60	91	91	82	81	84
MINIMUM	38.2	3.1050	2.7673	3.8200	138.60	27.50%	8.736
RANGE	0.0	0.0034	0.0000	0.0028	0.00	0.000	0.000
ARITH. MEAN	38.2	3.1016	2.7673	3.8172	138.60	27.504	8.736
GEOM. MEAN	5.0	0.5137	0.2983	0.4664	15.35	3.298	1.024
ARITH. STD. DEV	7.8	0.6287	0.4998	0.7132	23.75	4.626	1.623
GEOM. MEAN	1.7	0.2390	0.0532	0.1454	5.17	1.124	0.428
1ST QUARTILE	0.5	0.1025	0.0139	0.0459	1.04	0.335	0.062
2ND QUARTILE	2.0	0.2340	0.0879	0.1805	6.37	1.629	0.400
3RD QUARTILE	5.5	0.7429	0.4275	0.5433	21.03	4.486	1.220
VOL. WGT. MEAN	*****	0.3036	0.2437	0.3810	11.47	2.437	0.781

# OF SAMPLES	CHLORIDE MG/H**2	MAGNESIUM MG/H**2	POTASSIUM MG/H**2	SODIUM MG/H**2	AMMONIUM AS N MG/H**2
MAXIMUM	82	84	83	84	86
MINIMUM	0.786	1.144	3.135	4.400	16.655
RANGE	0.000	0.000	0.000	0.000	0.000
ARITH. MEAN	8.786	1.144	3.135	4.400	16.655
GEOM. MEAN	0.826	0.177	0.272	0.344	2.129
ARITH. STD. DEV	1.463	0.259	0.403	0.638	3.061
GEOM. MEAN	0.429	0.090	0.139	0.147	0.503
1ST QUARTILE	0.072	0.010	0.039	0.054	0.052
2ND QUARTILE	0.420	0.063	0.155	0.160	0.909
3RD QUARTILE	0.907	0.227	0.360	0.359	2.805
VOL. WGT. MEAN	0.617	0.135	0.206	0.262	1.699

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEN #02

PERIOD OF REPORT : JAN 13, 88 TO DEC 28, 88

PRECIP.	FREE H ⁺ FIELD	FREE H ⁺ LAB	TOTAL H ⁺ GRAM	SULPHATE	NITRATE	CALCIUM
MM	MG/HMM2	MG/HMM2	MG/HMM2	MG/HMM2	MG/HMM2	MG/HMM2
: 120	70	107	107	104	104	93
: 69.0	20.3654	7.2252	9.1080	334.65	28.980	20.340
: 0.1	0.0002	0.0000	0.0025	0.10	0.000	0.000
: 68.9	20.3632	7.2252	9.1055	334.48	28.960	20.340
: 7.4	1.6102	0.3686	0.5678	25.86	4.359	3.732
: 10.7	3.0464	0.8709	1.1179	42.18	4.809	4.271
: 3.7	0.3388	0.0294	0.0596	11.50	2.575	2.345
: 1.6	0.1122	0.0032	0.0094	5.64	1.127	1.316
: 3.7	0.6504	0.1009	0.2262	12.70	2.086	2.086
: 9.1	1.3553	0.3712	0.6463	31.22	5.910	4.626
: *****	1.0760	0.3813	0.5768	25.30	4.259	3.249
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	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N
	HC/HMW2	HC/HMW2	HC/HMW2	HC/HMW2	HC/HMW2
# OF SAMPLES	106	93	94	94	107
MAXIMUM	12.328	4.290	4.992	6.946	24.600
MINIMUM	0.000	0.000	0.033	0.000	0.032
RANGE	12.328	4.290	4.959	6.946	24.568
MEAN	1.750	0.684	0.777	0.777	3.176
ARITH. MEAN	1.908	0.807	0.782	1.032	4.808
ARITH. STD. DEV	1.107	0.433	0.406	0.450	1.904
GEOM. MEAN	1.107	0.433	0.406	0.450	1.904
1ST QUARTILE	0.450	0.210	0.210	0.177	0.907
2ND QUARTILE	1.250	0.368	0.394	0.431	1.864
3RD QUARTILE	2.296	0.745	0.699	0.949	6.604
VOL. WGT. MEAN	1.750	0.579	0.573	0.682	3.722

資料來源：不足數據

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(12): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01
PERIOD OF REPORT : JAN 3, 88 TO DEC 30, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD	FREE H+ LAB	TOTAL H+ GRAN	SULPHATE MG/H#*2	NITRATE AS N MG/H#*2	CALCIUM MG/H#*2
MAXIMUM	129	69	112	112	10%	109	100
MINIMUM	40.2	13.1962	3.0231	3.4850	180.18	32.487	33.306
RANGE	0.1	0.0003	0.0000	0.0000	0.00	0.000	0.000
ARITH. MEAN	40.1	13.1959	5.0231	3.4850	180.18	32.487	33.306
ARITH. STD. DEV	5.1	1.1772	0.3296	0.4842	20.94	3.640	2.817
GEOM. MEAN	6.9	1.9531	0.4923	0.4556	27.40	4.261	4.524
1ST QUARTILE	2.3	0.3064	0.0409	0.1997	11.37	2.214	1.498
2ND QUARTILE	1.0	0.1464	0.0123	0.0661	5.80	1.082	0.836
3RD QUARTILE	2.2	0.4211	0.1219	0.2335	9.92	2.360	1.512
VOL. WGT. MEAN	6.8	1.2453	0.4897	0.6976	27.82	4.396	2.778
	*****	0.7255	0.2884	0.4237	17.87	3.107	2.247

# OF SAMPLES	CHLORIDE MG/H#*2	MAGNESIUM MG/H#*2	POTASSIUM MG/H#*2	SODIUM MG/H#*2	AMMONIUM AS N MG/H#*2
MAXIMUM	109	100	99	99	111
MINIMUM	7.371	4.617	3.060	2.970	30.030
RANGE	0.000	0.000	0.000	0.022	0.000
ARITH. MEAN	7.371	4.617	3.060	2.948	30.030
ARITH. STD. DEV	1.224	0.489	0.343	0.479	3.099
GEOM. MEAN	1.170	0.756	0.428	0.520	4.680
1ST QUARTILE	0.864	0.289	0.224	0.286	1.649
2ND QUARTILE	0.465	0.120	0.120	0.139	0.745
3RD QUARTILE	0.803	0.258	0.208	0.235	1.626
VOL. WGT. MEAN	1.616	0.504	0.339	0.651	3.599
	1.045	0.390	0.272	0.379	2.701

***** 1 INCUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

PERIOD OF REPORT : DEC 31, 87 TO DEC 31, 88

# OF SAMPLES	PRECIP. MM	FREE FIELD MG/H**2	FREE LAB MG/H**2	TOTAL H+ GRAN MG/H**2	SULPHATE MG/H**2	NITRATE AS N MG/H**2	CALCIUM MG/H**2
MAXIMUM	135	83	120	120	115	117	108
MINIMUM	30.4	2.1683	2.2189	2.7580	134.40	14.896	12.160
RANGE	0.0	0.0001	0.0000	0.0030	0.05	0.018	0.000
ARITH. MEAN	30.4	2.1683	2.2188	2.7550	134.35	14.878	12.160
ARITH. STD. DEV	5.1	0.3740	0.2504	0.4029	14.54	2.896	1.292
GEOM. MEAN	6.0	0.4141	0.3758	0.5202	20.76	3.246	2.060
1ST QUARTILE	2.3	0.1439	0.0460	0.1538	5.28	1.260	0.560
2ND QUARTILE	0.9	0.0697	0.0137	0.0591	1.80	0.427	0.164
3RD QUARTILE	2.8	0.2320	0.0897	0.1815	6.45	1.596	0.610
VOL. WGT. MEAN	7.0	0.5339	0.3048	0.5553	18.37	4.178	1.324
	*****	0.2495	0.2261	0.3639	12.60	2.468	1.063

AMMONIUM

SODIUM

POTASSIUM

MAGNESIUM

CHLORIDE

# OF SAMPLES	PRECIP. MM	FREE FIELD MG/H**2	FREE LAB MG/H**2	TOTAL H+ GRAN MG/H**2	SULPHATE MG/H**2	NITRATE AS N MG/H**2	CALCIUM MG/H**2
MAXIMUM	116	107	108	108	123	123	108
MINIMUM	8.968	1.368	1.633	5.092	17.328	17.328	12.160
RANGE	0.000	0.000	0.004	0.006	0.002	0.002	0.000
ARITH. MEAN	8.968	1.368	1.629	5.086	17.326	17.326	12.160
ARITH. STD. DEV	0.862	0.160	0.246	0.310	2.301	2.301	0.000
GEOM. MEAN	1.293	0.290	0.283	0.547	2.940	2.940	0.000
1ST QUARTILE	0.482	0.119	0.139	0.166	0.742	0.742	0.000
2ND QUARTILE	0.157	0.011	0.072	0.076	0.232	0.232	0.000
3RD QUARTILE	0.430	0.071	0.174	0.189	1.257	1.257	0.000
VOL. WGT. MEAN	1.163	0.170	0.298	0.353	3.302	3.302	0.000
	0.753	0.147	0.202	0.255	2.121	2.121	0.000

***** : INSUFFICIENT DATA

NOTE(1) : PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2) : THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PERIOD OF REPORT : DEC 31, 87 TO DEC 30, 88

	PRECIP.	FREE H+ FIELD MG/H#*2	FREE H+ LAB MG/H#*2	TOTAL H+ GRAN MG/H#*2	SULPHATE MG/H#*2	NITRATE AS N MG/H#*2	CALCIUM MG/H#*2
# OF SAMPLES	173	81	148	150	142	142	138
MAXIMUM	38.4	6.0451	3.0228	3.9804	145.52	25.700	25.080
MINIMUM	0.1	0.0033	0.0000	0.0054	0.10	0.010	0.000
RANGE	38.3	6.0418	3.0228	3.9749	145.42	25.190	25.080
ARITH. MEAN	5.2	1.0105	0.2511	0.3953	17.80	3.139	2.464
ARITH. STD. DEV	6.9	1.4084	0.4576	0.6095	23.68	3.977	3.492
GEOM. MEAN	2.5	0.3708	0.0179	0.1363	7.68	1.496	1.256
1ST QUARTILE	0.9	0.1605	0.0007	0.0364	3.06	0.658	0.608
2ND QUARTILE	2.3	0.4171	0.0500	0.1577	10.53	1.948	1.232
3RD QUARTILE	5.8	1.0653	0.2970	0.4806	23.19	4.100	3.006
VOL. WGT. MEAN	*****	0.5780	0.2191	0.3682	15.02	2.648	2.028

AMMONIUM

# OF SAMPLES	HG/H#*2	HG/H#*2	HG/H#*2	HG/H#*2	AS N HG/H#*2
: 142	138	137	138	151	
: 15.408	4.890	2.590	6.300	17.980	
: 0.000	0.000	0.000	0.018	0.000	
: 15.408	4.890	2.590	6.282	17.980	
: 1.206	0.500	0.228	0.455	2.679	
: 2.122	0.762	0.329	0.811	3.581	
: 0.610	0.256	0.124	0.196	1.360	
: 0.209	0.099	0.046	0.084	0.540	
: 0.545	0.269	0.112	0.175	1.712	
: 1.189	0.558	0.255	0.384	3.760	
: 1.017	0.412	0.187	0.374	2.550	

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
AQUOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE

PERIOD OF REPORT : MAY 16, 88 TO DEC 28, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
50		0	40	40	36	36	37
MAXIMUM	30.4	*****	2.9000	3.5090	140.65	11.552	5.094
MINIMUM	0.1	*****	0.0012	0.0068	0.87	0.102	0.000
RANGE	30.3	*****	2.8988	3.5022	139.78	11.450	5.094
ARITH. MEAN	7.1	*****	0.4308	0.6098	20.71	2.958	0.850
ARITH. STD. DEV	8.9	*****	0.5759	0.7157	26.89	2.953	1.105
GEOM. MEAN	2.6	*****	0.1740	0.2876	10.20	1.696	0.553
1ST QUANTILE	0.6	*****	0.0566	0.0971	4.20	0.785	0.162
2ND QUANTILE	3.0	*****	0.2765	0.4028	12.63	1.999	0.430
3RD QUANTILE	8.8	*****	0.4517	0.7558	24.14	3.756	1.037
VOL. WGT. MEAN	*****	*****	0.3669	0.5195	16.97	2.407	0.656

AMMONIUM
AS N
MG/HMM2

POTASSIUM
MG/HMM2

MAGNESIUM
MG/HMM2

CHLORIDE
MG/HMM2

SODIUM
MG/HMM2

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
36		37	37	40	40	40	40
MAXIMUM	3.190	0.986	0.986	1.938	9.792	9.792	9.792
MINIMUM	0.000	0.000	0.000	0.012	0.032	0.032	0.032
RANGE	3.190	0.986	0.986	1.926	9.760	9.760	9.760
ARITH. MEAN	0.835	0.143	0.140	0.337	1.590	1.590	1.590
ARITH. STD. DEV	0.835	0.212	0.212	0.408	2.242	2.242	2.242
GEOM. MEAN	0.642	0.151	0.117	0.175	0.643	0.643	0.643
1ST QUANTILE	0.272	0.028	0.030	0.060	0.100	0.100	0.100
2ND QUANTILE	0.635	0.078	0.002	0.170	0.903	0.903	0.903
3RD QUANTILE	1.691	0.173	0.150	0.428	1.972	1.972	1.972
VOL. WGT. MEAN	0.774	0.113	0.117	0.266	1.366	1.366	1.366

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

PERIOD OF REPORT : JAN 7, 88 TO DEC 28, 88

	PRECIP. MM	FREE H+ FIELD MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
# OF SAMPLES	84	0	69	69	68	68	68
MAXIMUM	140.0	*****	0.6933	2.8700	49.82	12.376	16.560
MINIMUM	0.1	*****	0.0005	0.0272	2.10	0.152	0.000
RANGE	139.9	*****	0.6929	2.8428	47.72	12.224	16.560
ARITH. MEAN	10.7	*****	0.1116	0.3628	11.91	2.825	2.161
ARITH. STD. DEV	16.5	*****	0.1327	0.3899	10.70	2.164	2.760
GEOM. MEAN	5.7	*****	0.0390	0.2558	8.71	2.142	1.333
1ST QUARTILE	3.7	*****	0.0072	0.1564	5.03	1.628	0.614
2ND QUARTILE	6.6	*****	0.0756	0.2561	8.03	2.204	1.152
3RD QUARTILE	12.3	*****	0.1585	0.4086	14.44	3.767	2.462
VOL. WGT. MEAN	*****	*****	0.0948	0.3082	10.02	2.378	1.612

	CHLORIDE MG/HMM2	MAGNESIUM MG/HMM2	POTASSIUM MG/HMM2	SODIUM MG/HMM2	AMMONIUM AS N MG/HMM2
# OF SAMPLES	68	68	68	68	69
MAXIMUM	3.630	2.970	1.950	4.289	18.224
MINIMUM	0.000	0.000	0.000	0.000	0.211
RANGE	3.630	2.970	1.950	4.289	18.013
ARITH. MEAN	0.725	0.317	0.595	0.495	3.202
ARITH. STD. DEV	0.678	0.437	0.407	0.755	3.247
GEOM. MEAN	0.704	0.270	0.334	0.323	2.064
1ST QUARTILE	0.318	0.084	0.143	0.139	1.109
2ND QUARTILE	0.605	0.181	0.250	0.282	2.149
3RD QUARTILE	0.938	0.375	0.477	0.508	3.928
VOL. WGT. MEAN	0.611	0.266	0.331	0.415	2.720

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10

PERIOD OF REPORT : JAN 8, 88 TO DEC 29, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD MG/H#*2	FREE H+ LAB MG/H#*2	TOTAL H+ GRAN MG/H#*2	SULPHATE MG/H#*2	NITRATE AS N MG/H#*2	CALCIUM MG/H#*2
MAXIMUM	60	21	51	51	53	53	50
MINIMUM	28.2	2.1023	1.8737	2.7664	95.09	15.561	13.224
RANGE	0.2	0.0002	0.0000	0.0000	0.24	0.000	0.000
ARITH. MEAN	28.0	2.1021	1.8737	2.7664	94.85	15.561	13.224
ARITH. STD. DEV	6.4	0.4287	0.3601	0.5924	23.29	4.299	3.036
GEOM. MEAN	3.7	0.3173	0.3746	0.5564	21.32	3.706	3.235
1ST QUANTILE	2.0	0.2307	0.1261	0.3391	12.98	2.634	1.764
2ND QUANTILE	4.2	0.3108	0.0646	0.1334	6.97	1.290	0.701
3RD QUANTILE	8.0	0.4875	0.2056	0.4522	16.46	2.976	1.968
VOL. WGT. MEAN	*****	0.8206	0.5340	0.8338	33.30	5.931	3.534
		0.5188	0.3590	0.5520	22.45	4.144	2.870

# OF SAMPLES	CHLORIDE MG/H#*2	MAGNESIUM MG/H#*2	POTASSIUM MG/H#*2	SODIUM MG/H#*2	AMMONIUM AS N MG/H#*2
MAXIMUM	53	50	51	51	50
MINIMUM	10.672	1.740	2.556	7.866	11.362
RANGE	0.000	0.000	0.000	0.000	0.066
ARITH. MEAN	10.672	1.740	2.556	7.866	11.296
ARITH. STD. DEV	1.360	0.392	0.324	0.579	3.290
GEOM. MEAN	1.808	0.419	0.452	1.189	2.894
1ST QUANTILE	0.732	0.236	0.206	0.277	1.970
2ND QUANTILE	0.279	0.110	0.063	0.072	0.913
3RD QUANTILE	0.712	0.217	0.194	0.208	2.630
VOL. WGT. MEAN	1.596	0.508	0.351	0.622	4.491
	1.310	0.370	0.307	0.550	3.104

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APLUS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

PERIOD OF REPORT : DEC 31, 87 TO DEC 31, 88

# OF SAMPLES	PRECIP.	FREE H+ FIELD	FREE H+ LAB	TOTAL H+ GRAN	SULPHATE MG/H**2	NITRATE AS N	CALCIUM MG/H**2
MAXIMUM	167	71	137	137	136	134	124
MINIMUM	40.0	4.8091	4.2861	5.2400	236.00	24.800	15.080
RANGE	0.0	0.0006	0.0000	0.0000	0.00	0.020	0.000
ARITH. MEAN	40.0	4.8084	4.2861	5.2375	236.00	24.780	15.080
ARITH. STD. DEV	4.6	0.4655	0.2344	0.3730	31.49	2.626	1.927
GEOM. MEAN	6.0	0.7678	0.5373	0.6878	16.53	3.859	2.912
1ST QUANTILE	2.1	0.1913	0.0325	0.1286	4.66	1.032	0.856
2ND QUANTILE	0.8	0.0735	0.0066	0.0430	1.50	0.362	0.282
3RD QUANTILE	2.0	0.2468	0.0645	0.1204	4.37	1.296	0.834
VOL. WGT. MEAN	6.1	0.4872	0.2334	0.3935	14.74	3.280	2.272
	*****	0.2595	0.2147	0.3418	13.16	2.369	1.610

# OF SAMPLES	CHLORIDE MG/H**2	MAGNESIUM MG/H**2	POTASSIUM MG/H**2	SODIUM MG/H**2	AMMONIUM AS N
MAXIMUM	137	124	123	124	140
MINIMUM	4.400	2.850	2.130	2.688	25.536
RANGE	0.000	0.000	0.000	0.000	0.001
ARITH. MEAN	4.400	2.850	2.130	2.688	25.535
ARITH. STD. DEV	0.162	0.242	0.155	0.248	2.149
GEOM. MEAN	0.858	0.432	0.247	0.381	3.900
1ST QUANTILE	0.362	0.114	0.093	0.144	0.573
2ND QUANTILE	0.120	0.030	0.027	0.064	0.193
3RD QUANTILE	0.349	0.090	0.077	0.120	0.723
VOL. WGT. MEAN	0.858	0.223	0.185	0.275	2.142
	0.606	0.202	0.130	0.207	1.991

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/DAILY/AEROCHEM./7011

PERIOD OF REPORT : DEC 31, 87 TO APR 26, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD MG/H**2	FREE H+ LAB MG/H**2	TOTAL H+ GRAN MG/H**2	SULPHATE MG/H**2	NITRATE AS N MG/H**2	CALCIUM MG/H**2
76	20.2	0	36	37	41	41	29
MAXIMUM	20.2	*****	1.2420	1.9200	58.40	10.908	4.560
MINIMUM	0.1	*****	0.0001	0.0150	0.09	0.018	0.000
RANGE	20.1	*****	1.2419	1.9050	58.31	10.890	4.560
ARITH. MEAN	3.4	*****	0.2590	0.4135	9.96	3.008	1.002
ARITH. STD. DEV	4.7	*****	0.2660	0.4013	11.55	2.753	1.106
GEOM. MEAN	1.1	*****	0.1027	0.2514	4.92	1.709	0.779
1ST QUANTILE	0.2	*****	0.0795	0.1256	1.98	0.983	0.192
2ND QUANTILE	1.3	*****	0.2148	0.3138	5.46	2.146	0.600
3RD QUANTILE	4.9	*****	0.3100	0.4916	13.43	3.624	1.530
VOL. WGT. MEAN	*****	*****	0.1533	0.2360	5.89	1.778	0.455

# OF SAMPLES	CHLORIDE MG/H**2	MAGNESIUM MG/H**2	POTASSIUM MG/H**2	SODIUM MG/H**2	AMMONIUM AS N MG/H**2
41	29	29	29	40	
MAXIMUM	2.592	0.876	0.340	1.875	6.666
MINIMUM	0.018	0.000	0.000	0.000	0.000
RANGE	2.574	0.876	0.340	1.875	6.666
ARITH. MEAN	0.683	0.109	0.088	0.470	1.433
ARITH. STD. DEV	0.624	0.176	0.083	0.518	1.794
GEOM. MEAN	0.459	0.229	0.106	0.345	0.544
1ST QUANTILE	0.249	0.000	0.024	0.118	0.105
2ND QUANTILE	0.517	0.051	0.061	0.205	0.176
3RD QUANTILE	0.847	0.135	0.118	0.529	1.888
VOL. WGT. MEAN	0.404	0.049	0.040	0.213	0.838

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM 804

PERIOD OF REPORT : JAN 1, 88 TO DEC 30, 88

# OF SAMPLES	PRECIP.	FREE H ⁺ FIELD	FREE H ⁺ LAB	TOTAL H ⁺ GRAN	SULPHATE	NITR. E. AS N	CALCIUM
	MM	MG/H**2	MG/H**2	MG/H**2	MG/H**2	MG/H**2	MG/H**2
MAXIMUM	161	73	135	135	131	131	115
MINIMUM	44.9	5.7842	3.9106	5.2533	208.56	19.756	27.008
RANGE	0.1	0.0011	0.0000	0.0048	0.23	0.000	0.000
ARITH. MEAN	44.8	5.7831	3.9106	5.2485	206.31	19.756	27.008
GEOM. MEAN	5.1	0.7359	0.2544	0.3971	27.06	3.073	2.819
ARITH. STD. DEV	6.7	1.0015	0.4695	0.6301	9.14	3.492	4.056
GEOM. MEAN	2.5	0.2602	0.0213	0.1532	3.86	1.581	1.400
1ST QUARTILE	1.1	0.1643	0.0009	0.0546	11.90	0.742	0.532
2ND QUARTILE	2.9	0.4196	0.0787	0.1924	22.55	2.157	1.283
3RD QUARTILE	6.0	0.8661	0.3137	0.5056	16.31	4.044	3.657
VOL. WGT. MEAN	*****	0.4047	0.2218	0.3463		2.608	2.193

# OF SAMPLES	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM
	MG/H**2	MG/H**2	MG/H**2	MG/H**2	MG/H**2
MAXIMUM	130	115	114	115	133
MINIMUM	8.160	5.486	2.110	3.307	24.515
RANGE	0.000	0.000	0.000	0.000	0.045
ARITH. MEAN	8.160	5.486	2.110	3.307	24.470
GEOM. MEAN	1.120	0.574	0.208	0.413	3.412
ARITH. STD. DEV	1.436	0.886	0.309	0.603	4.055
GEOM. MEAN	0.602	0.281	0.138	0.220	1.922
1ST QUARTILE	0.222	0.114	0.059	0.065	0.938
2ND QUARTILE	0.605	0.254	0.107	0.206	2.193
3RD QUARTILE	1.400	0.638	0.247	0.461	4.062
VOL. WGT. MEAN	0.947	0.447	0.161	0.321	2.944

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
APFOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF DEPOSITION

STATION-WILKER AEROCHEM SITE NO. 1

	EQUIVALENT PREC. DEPTH MM	SULFATE				NITRATE		CALCIUM		CHLORIDE		MAGNESIUM	
		MG/H**2		MG/H**2		MG/H**2		MG/H**2		MG/H**2		MG/H**2	
# OF SAMPLES	180.0	180		180		180		180		180		180	
MAXIMUM	32.4	77.49		19.61		17.64		13.68		2.695		0.800	
MINIMUM	0.2	0.08		0.04		0.00		0.00		0.00		0.000	
ARITH. MEAN	4.3	14.71		3.28		1.70		0.96		0.243		0.372	
ARITH. STD. DEV	5.4	14.91		3.14		2.35		1.46		0.577		0.135	
GEOM. MEAN	1.9	7.66		1.88		0.94		0.57		0.040		0.040	
1ST QUANTILE	0.4	3.26		1.10		0.43		0.18		0.132		0.132	
2ND QUANTILE	2.2	10.78		2.51		0.97		0.54		0.288		0.288	
3RD QUANTILE	6.4	19.56		4.28		2.10		1.26		0.169		0.169	
VOL. WGT. MEAN	.	10.57		2.37		1.18		0.69		60		60	
MISSING VALUES	2.0	56		57		60		55		60		60	

	POTASSIUM MG/H**2	SODIUM		AMMONIUM		ACIDITY GRAN		FREEH+	
		MG/H**2		MG/H**2		UG/H**2		LAB	
# OF SAMPLES	180	180		180		180		180.00	
MAXIMUM	0.800	2.736		9.546		1992.60		1562.5	
MINIMUM	0.000	0.000		0.000		8.36		0.00	
ARITH. MEAN	0.157	0.413		1.851		452.49		291.93	
ARITH. STD. DEV	0.144	0.548		1.944		424.59		304.63	
GEOM. MEAN	0.115	0.217		1.052		262.13		111.12	
1ST QUANTILE	0.056	0.078		0.478		146.40		63.65	
2ND QUANTILE	0.120	0.212		1.292		338.52		188.47	
3RD QUANTILE	0.231	0.495		2.482		609.75		433.61	
VOL. WGT. MEAN	0.109	0.287		1.343		319.04		58.00	
MISSING VALUES	60	60		56		56		56	

PART VI

SUMMARY STATISTICS OF WET DEPOSITION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APDS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 31, 87 TO DEC 31, 88

PRECIP.		FREE H+		FREE H+		TOTAL H+		SULPHATE		NITRATE		CALCIUM	
MM		MG/HMM2		LAB		MG/HMM2		MG/HMM2		AS N		MG/HMM2	
# OF SAMPLES	: 648	350		75		576		564		558		518	
MAXIMUM	: 72.0	5.2048		4.3292		5.7147		307.80		29.520		27.500	
MINIMUM	: 0.0	0.0001		0.0000		0.0012		0.00		0.000		0.000	
RANGE	: 72.0	5.2047		4.3292		5.7135		307.80		29.520		27.500	
ARITH. MEAN	: 5.0	0.4227		0.2575		0.4009		14.69		2.916		1.749	
ARITH. STD. DEV	: 6.6	0.6006		0.4827		0.6435		28.11		3.863		2.999	
GEOM. MEAN	: 2.1	0.1863		0.0647		0.1447		4.76		1.180		0.761	
1ST QUANTILE	: 0.8	0.0916		0.0122		0.0499		1.64		0.413		0.230	
2ND QUANTILE	: 2.4	0.2525		0.0891		0.1718		5.99		1.525		0.774	
3RD QUANTILE	: 6.6	0.5181		0.2940		0.4646		17.20		3.969		1.868	
VOL. WGT. MEAN	: *****	0.2663		0.2359		0.5676		13.19		2.597		1.457	

CHLORIDE		MAGNESIUM		POTASSIUM		SODIUM		AMMONIUM	
MG/HMM2		MG/HMM2		MG/HMM2		MG/HMM2		AS N	
# OF SAMPLES	: 565	517		518		518		580	
MAXIMUM	: 15.120	4.902		2.130		7.200		35.112	
MINIMUM	: 0.000	0.000		0.000		0.000		0.000	
RANGE	: 15.120	4.902		2.130		7.200		35.112	
ARITH. MEAN	: 0.865	0.230		0.193		0.350		2.119	
ARITH. STD. DEV	: 1.402	0.437		0.271		0.665		3.562	
GEOM. MEAN	: 0.419	0.120		0.110		0.168		0.591	
1ST QUANTILE	: 0.127	0.025		0.039		0.055		0.179	
2ND QUANTILE	: 0.384	0.090		0.105		0.165		0.850	
3RD QUANTILE	: 1.055	0.266		0.243		0.360		2.426	
VOL. WGT. MEAN	: 0.778	0.191		0.161		0.292		1.950	

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHEASTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : APR 11, 88 TO DEC 31, 88

# OF SAMPLES	PRECIP. MM	FREE FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ GRAN MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
MAXIMUM	: 262	127	179	179	171	170	168
MINIMUM	: 140.0	4.2961	3.1123	6.5540	248.60	49.720	27.120
RANGE	: 0.0	0.0034	0.0000	0.0028	0.00	0.000	0.000
ARITH. MEAN	: 140.0	4.2927	3.1123	8.5512	248.60	49.720	27.120
GEOM. MEAN	: 5.8	0.4515	0.2686	0.4697	14.29	2.749	1.082
ARITH. STD. DEV	: 15.1	0.6259	0.4702	0.8680	27.55	5.185	2.604
GEOM. MEAN	: 1.2	0.2106	0.0520	0.1450	4.21	0.865	0.409
1ST QUANTILE	: 0.3	0.0862	0.0123	0.0415	1.02	0.153	0.065
2ND QUANTILE	: 1.4	0.2243	0.0820	0.1916	5.74	1.055	0.299
3RD QUANTILE	: 5.4	0.5780	0.3019	0.4963	17.15	3.330	1.004
VOL. WGT. MEAN	: *****	0.2669	0.1911	0.3342	9.73	1.862	0.733

CHLORIDE
MG/M**2

POTASSIUM
MG/M**2

SODIUM
MG/M**2

AMMONIUM
AS N
MG/M**2

# OF SAMPLES	: 172
MAXIMUM	: 8.786
MINIMUM	: 0.000
RANGE	: 8.786
ARITH. MEAN	: 0.642
GEOM. MEAN	: 1.193
ARITH. STD. DEV	: 0.351
GEOM. MEAN	: 0.056
1ST QUANTILE	: 0.237
2ND QUANTILE	: 0.688
3RD QUANTILE	: 0.439
VOL. WGT. MEAN	: 0.439

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. ABOVE REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APTOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JAN 1, 88 TO DEC 30, 88

# OF SAMPLES	PRECIP. MM	FREE H+ FIELD MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
MAXIMUM	: 341	0	254	254	260	260	253
MINIMUM	: 140.0	*****	1.2866	2.8700	126.84	19.488	30.240
RANGE	: 0.1	*****	0.0000	0.0010	0.00	0.000	0.000
ARITH. MEAN	: 139.9	*****	1.2865	2.8690	126.94	19.488	30.240
ARITH. STD. DEV	: 7.5	*****	0.0868	0.2722	9.84	2.241	1.875
GEOM. MEAN	: 11.5	*****	0.1378	0.3228	13.49	2.408	3.209
1ST QUARTILE	: 2.9	*****	0.0192	0.1439	4.31	1.138	0.933
2ND QUARTILE	: 1.1	*****	0.0040	0.0734	1.99	0.588	0.254
3RD QUARTILE	: 4.3	*****	0.0330	0.1932	5.79	1.587	0.896
VOL. WGT. MEAN	: 9.3	*****	0.1138	0.3947	13.35	3.142	2.000
	: *****		0.0690	0.2163	7.94	1.808	1.470

AMMONIUM
AS N
MG/HMM2

SODIUM
MG/HMM2

POTASSIUM
MG/HMM2

MAGNESIUM
MG/HMM2

CHLORIDE
MG/HMM2

# OF SAMPLES	: 260	253	253	252	268
MAXIMUM	: 11.936	3.192	5.292	6.384	29.479
MINIMUM	: 0.000	0.000	0.000	0.000	0.000
RANGE	: 11.936	3.192	5.292	6.384	29.479
ARITH. MEAN	: 0.616	0.282	0.341	0.435	2.549
ARITH. STD. DEV	: 1.015	0.469	0.523	0.774	3.554
GEOM. MEAN	: 0.459	0.202	0.196	0.226	0.922
1ST QUARTILE	: 0.106	0.031	0.051	0.073	0.331
2ND QUARTILE	: 0.372	0.132	0.172	0.188	1.376
3RD QUARTILE	: 0.750	0.335	0.400	0.431	3.230
VOL. WGT. MEAN	: 0.497	0.221	0.267	0.340	2.103

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JAN 4, 88 TO DEC 31, 88

	PRECIP. MM	FREE H+ FIELD MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
# OF SAMPLES	342	67	266	266	272	271	261
MAXIMUM	113.8	2.1023	4.0378	6.6004	176.39	27.312	17.640
MINIMUM	0.2	0.0002	0.0000	0.0000	0.00	0.000	0.000
RANGE	113.6	2.1021	4.0378	6.6004	176.39	27.312	17.640
ARITH. MEAN	5.8	0.4578	0.3428	0.5331	18.36	3.4449	1.940
GEOM. MEAN	2.6	0.4294	0.4217	0.6221	21.75	3.449	2.528
1ST QUANTILE	0.8	0.2358	0.1306	0.2955	9.15	2.108	1.044
2ND QUANTILE	3.0	0.1414	0.0780	0.1605	4.46	1.238	0.420
3RD QUANTILE	7.4	0.3906	0.2302	0.3777	11.69	2.568	1.080
VOL. WGT. MEAN	*****	0.6012	0.4647	0.6781	23.16	4.765	2.292
		0.3745	0.2801	0.4345	15.29	2.960	1.555

CHLORIDE MG/HMM2	MAGNESIUM MG/HMM2	POTASSIUM MG/HMM2	SODIUM MG/HMM2	AMMONIUM AS N MG/HMM2
273	261	262	262	268
34.750	2.695	2.556	0.000	16.615
0.000	0.000	0.000	0.000	0.000
34.750	2.695	2.556	7.866	16.615
1.186	0.281	0.199	0.413	2.349
2.1551	0.377	0.262	0.234	2.625
0.653	0.181	0.139	0.081	1.229
0.228	0.058	0.054	0.201	0.659
0.576	0.153	0.120	0.462	1.435
1.360	0.318	0.240	0.462	3.082
0.991	0.226	0.160	0.334	1.950

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JAN 13, 88 TO DEC 31, 88

# OF SAMPLES	PRECIP. MM	FREE H+ MG/HMM2	FREE H+ LAB MG/HMM2	TOTAL H+ GRAN MG/HMM2	SULPHATE MG/HMM2	NITRATE AS N MG/HMM2	CALCIUM MG/HMM2
MAXIMUM	: 69.0	293	515	516	495	495	455
MINIMUM	: 0.1	20.3634	7.2252	9.1080	334.65	32.487	33.306
RANGE	: 68.9	0.0002	0.0000	0.0000	0.00	0.000	0.000
ARITH. MEAN	: 5.5	20.3632	7.2252	9.1080	334.65	32.487	33.306
ARITH. STD. DEV	: 7.8	1.1246	0.2926	0.4481	20.29	3.445	2.857
GEOM. MEAN	: 2.6	1.9927	0.5795	0.7548	30.18	4.159	4.033
1ST QUANTILE	: 1.0	0.3177	0.0248	0.1607	9.20	1.785	1.499
2ND QUANTILE	: 2.6	0.1561	0.0015	0.0490	4.01	0.820	0.680
3RD QUANTILE	: 6.6	0.4473	0.0805	0.1825	10.86	2.262	1.471
VOL. WGT. MEAN	: *****	1.1482	0.3181	0.5179	25.98	4.335	3.200
		0.6716	0.2613	0.4005	17.60	2.988	2.311

CHLORIDE MG/HMM2	MAGNESIUM MG/HMM2	POTASSIUM MG/HMM2	SODIUM MG/HMM2	AMMONIUM AS N MG/HMM2
496	455	453	455	510
15.408	5.486	4.992	6.946	30.030
0.000	0.000	0.000	0.000	0.000
15.408	5.486	4.992	6.946	30.030
1.296	0.547	0.333	0.517	3.217
1.721	0.799	0.502	0.766	4.177
0.742	0.293	0.180	0.263	1.615
0.296	0.118	0.070	0.107	0.718
0.736	0.276	0.168	0.230	1.026
1.575	0.591	0.352	0.632	3.946
1.127	0.443	0.269	0.418	2.849

# OF SAMPLES	: 496
MAXIMUM	: 15.408
MINIMUM	: 0.000
RANGE	: 15.408
ARITH. MEAN	: 1.296
ARITH. STD. DEV	: 1.721
GEOM. MEAN	: 0.742
1ST QUANTILE	: 0.296
2ND QUANTILE	: 0.736
3RD QUANTILE	: 1.575
VOL. WGT. MEAN	: 1.127

***** : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

PART VII

SUMMARY STATISTICS OF AIR CONCENTRATION BY STATION, REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AIR

PERIOD OF REPORT : JAN 15,88 TO DEC 31,88

PAGE : 1

# OF SAMPLES	SULPHUR DIOXIDE UG/H*3	SULPHATE UG/H*3	NITRIC AS N UG/H*3	AMMONIUM AS N UG/H*3	NITRATE AS N UG/H*3	TOTAL NO3 AS N UG/H*3
MAXIMUM	: 294.0	297.00	298.00	293.000	298.00	298.00
MINIMUM	: 43.5	73.10	1.31	5.370	2.01	2.29
RANGE	: 0.0	0.00	0.00	0.000	0.00	0.00
ARITH. MEAN	: 43.5	73.10	1.31	5.370	2.01	2.29
ARITH. STD. DEV	: 5.3	3.95	0.25	0.833	0.21	0.46
GEOM. MEAN	: 6.4	6.55	0.27	0.982	0.28	0.46
1ST QUANTILE	: 2.7	2.25	0.19	0.495	0.12	0.29
2ND QUANTILE	: 0.8	1.13	0.05	0.197	0.04	0.11
3RD QUANTILE	: 3.3	2.09	0.15	0.485	0.10	0.27
	: 7.0	4.00	0.37	1.066	0.29	0.70

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AIR										#11		PAGE : 1											
PERIOD OF REPORT				DEC 31,87	TO		DEC 31,88																
		SULPHUR DIOXIDE		UG/H**3		SULPHATE		UG/H**3		NITRIC		AS N		AMMONIUM		AS N		NITRATE		AS N		TOTL NO3	
		UG/H**3								UG/H**3						UG/H**3				UG/H**3			
# OF SAMPLES		:	237.0			237.00				237.00				236.000				235.00				235.00	
MAXIMUM		:	82.6			28.15				1.57				5.688				1.16				2.01	
MINIMUM		:	0.0			0.00				0.00				0.000				0.00				0.00	
RANGE		:	82.6			28.15				1.57				5.688				1.16				2.01	
ARITH. MEAN		:	3.9			3.51				0.33				0.809				0.12				0.45	
ARITH. STD. DEV		:	7.0			4.89				0.35				1.116				0.16				0.42	
GEOM. MEAN		:	1.9			1.94				0.26				0.531				0.12				0.34	
1ST QUARTILE		:	0.6			0.66				0.07				0.120				0.03				0.13	
2ND QUARTILE		:	1.7			1.84				0.21				0.431				0.07				0.31	
3RD QUARTILE		:	4.5			3.97				0.46				1.013				0.14				0.70	

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AIR				#08	PAGE : 1			
PERIOD OF REPORT : DEC 31,87		TO DEC 31,88						
	SULPHUR DIOXIDE UG/H#*3	SULPHATE UG/H#*3	NITRIC AS N UG/H#*3	AMMONIUM AS N UG/H#*3	NITRATE AS N UG/H#*3	TOTL N03 AS N UG/H#*3		
# OF SAMPLES :	359.0	359.00	359.00	358.000	359.00	359.00		
MAXIMUM :	34.9	26.04	1.10	7.083	1.41	2.03		
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00		
RANGE :	34.9	26.04	1.10	7.083	1.41	2.03		
ARITH. MEAN :	4.7	3.15	0.18	0.667	0.12	0.30		
ARITH. STD. DEV :	6.1	3.84	0.21	0.932	0.22	0.35		
GEOM. MEAN :	2.3	2.02	0.15	0.321	0.09	0.18		
1ST QUARTILE :	0.6	1.13	0.03	0.105	0.01	0.06		
2ND QUARTILE :	2.3	1.96	0.10	0.308	0.04	0.15		
3RD QUARTILE :	6.5	3.54	0.27	0.836	0.10	0.43		

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EGBERT/DAILY/AIR

PERIOD OF REPORT : SEP 29,88 TO DEC 31,88

PAGE : 1

	SULPHUR DIOXIDE UG/HR*3	SULPHATE UG/HR*3	NITRIC AS N UG/HR*3	AMMONIUM AS N UG/HR*3	NITRATE AS N UG/HR*3	TOTL N03 AS N UG/HR*3
# OF SAMPLES	: 88.0	: 88.00	: 88.00	: 88.000	: 88.00	: 88.00
MAXIMUM	: 30.5	: 12.83	: 1.24	: 4.041	: 2.05	: 2.41
MINIMUM	: 0.0	: 0.00	: 0.00	: 0.000	: 0.00	: 0.01
RANGE	: 30.5	: 12.83	: 1.24	: 4.041	: 2.05	: 2.40
ARITH. MEAN	: 7.7	: 2.59	: 0.13	: 1.056	: 0.53	: 0.66
ARITH. STD. DEV	: 7.9	: 2.24	: 0.16	: 0.944	: 0.58	: 0.64
GEOM. MEAN	: 4.2	: 1.91	: 0.10	: 0.658	: 0.25	: 0.36
1ST QUARTILE	: 1.8	: 1.14	: 0.05	: 0.343	: 0.08	: 0.15
2ND QUARTILE	: 5.7	: 1.96	: 0.09	: 0.820	: 0.31	: 0.46
3RD QUARTILE	: 10.6	: 3.08	: 0.15	: 1.386	: 0.75	: 0.99

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AIR				#16	PAGE : 1			
PERIOD OF REPORT : DEC 31,67 TO DEC 31,68								
# OF SAMPLES	SULPHUR DIOXIDE UG/H**3	SULPHATE UG/H**3	NITRIC AS N UG/H**3	AMMONIUM AS N UG/H**3	NITRATE AS N UG/H**3	TOTL NO3 AS N UG/H**3		
:	330.0	330.00	330.00	329.000	330.00	330.00		
MAXIMUM :	5.6	11.42	1.07	2.822	1.18	2.19		
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00		
RANGE :	5.6	11.42	1.07	2.822	1.18	2.19		
ARITH. MEAN :	1.0	1.38	0.10	0.327	0.08	0.18		
ARITH. STD. DEV :	1.1	1.36	0.13	0.409	0.17	0.26		
GEOM. MEAN :	0.7	0.96	0.12	0.181	0.14	0.13		
1ST QUARTILE :	0.2	0.60	0.01	0.088	0.00	0.04		
2ND QUARTILE :	0.5	0.99	0.06	0.199	0.04	0.09		
3RD QUARTILE :	1.4	1.66	0.13	0.418	0.07	0.20		

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWANDA/DAILY/AIR				PERIOD OF REPORT : FEB 3,68 TO DEC 31,68		PAGE : 1	
	SULPHUR DIOXIDE UG/HM ³	SULPHATE UG/HM ³	NITRIC AS N UG/HM ³	AMMONIUM AS N UG/HM ³	NITRATE AS N UG/HM ³	TOTL NO ₃ AS N UG/HM ³	
# OF SAMPLES :	329.0	329.00	329.00	329.000	329.00	329.00	
MAXIMUM :	76.6	17.38	1.24	3.429	1.06	1.25	
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00	
RANGE :	76.6	17.38	1.24	3.429	1.06	1.25	
ARITH. MEAN :	4.0	2.11	0.10	0.379	0.04	0.14	
ARITH. STD. DEV :	8.9	2.51	0.16	0.504	0.08	0.19	
GEOM. MEAN :	1.3	1.34	0.09	0.207	0.06	0.09	
1ST QUARTILE :	0.2	0.68	0.02	0.091	0.00	0.03	
2ND QUARTILE :	0.8	1.36	0.05	0.222	0.02	0.07	
3RD QUARTILE :	4.3	2.39	0.12	0.443	0.04	0.16	

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APROS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AIR

PERIOD OF REPORT : DEC 31,87 TO DEC 31,88

PAGE : 1

	SULPHUR DIOXIDE UG/H**3	SULPHATE UG/H**3	NITRIC AS N UG/H**3	AMMONIUM AS N UG/H**3	NITRATE AS N UG/H**3	TOTL N03 AS N UG/H**3
# OF SAMPLES :	362.0	362.00	362.00	361.000	362.00	362.00
MAXIMUM :	82.4	22.81	1.06	4.234	1.55	1.78
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00
RANGE :	82.4	22.81	1.06	4.234	1.55	1.78
ARITH. MEAN :	4.5	2.46	0.11	0.505	0.07	0.18
ARITH. STD. DEV :	9.8	2.87	0.15	0.690	0.15	0.25
GEOM. MEAN :	1.5	1.52	0.10	0.242	0.08	0.11
1ST QUARTILE :	0.3	0.85	0.02	0.106	0.01	0.04
2ND QUARTILE :	1.3	1.54	0.05	0.251	0.03	0.09
3RD QUARTILE :	4.8	2.72	0.15	0.586	0.06	0.20

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGHOODS/DAILY/AIR				#02					PAGE : 1
PERIOD OF REPORT		DEC 31,87	TO	DEC 31,88					
		SULPHUR DIOXIDE UG/H**3	SULPHATE UG/H**3	NITRIC AS N UG/H**3	AMMONIUM AS N UG/H**3	NITRATE AS N UG/H**3	TOTAL NO3 AS N UG/H**3		
# OF SAMPLES	:	358.0	358.00	358.00	358.000	358.00	358.00	358.00	
MAXIMUM	:	60.9	41.19	2.67	8.956	3.38	3.90	3.90	
MINIMUM	:	0.0	0.00	0.00	0.000	0.00	0.01	0.01	
RANGE	:	60.9	41.19	2.67	8.956	3.38	3.89	3.89	
ARITH. MEAN	:	9.1	5.09	0.39	1.333	0.52	0.90	0.90	
ARITH. STD. DEV	:	8.6	5.80	0.38	1.354	0.53	0.69	0.69	
GEOM. MEAN	:	5.7	3.38	0.25	0.859	0.35	0.65	0.65	
1ST QUARTILE	:	3.0	1.97	0.12	0.484	0.15	0.37	0.37	
2ND QUARTILE	:	6.8	3.23	0.25	0.964	0.36	0.81	0.81	
3RD QUARTILE	:	12.2	5.85	0.54	1.652	0.71	1.19	1.19	

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AIR

PERIOD OF REPORT : MAY 11,88 TO DEC 31,88

PAGE : 1

	SULPHUR DIOXIDE UG/HM*3	SULPHATE UG/HM*3	NITRIC AS N UG/HM*3	AMMONIUM AS N UG/HM*3	NITRATE AS N UG/HM*3	TOTL NO3 AS N UG/HM*3
# OF SAMPLES :	217.0	218.00	218.00	218.000	218.00	218.00
MAXIMUM :	120.4	40.72	1.36	5.884	1.29	2.30
MINIMUM :	0.0	0.08	0.00	0.000	0.00	0.04
RANGE :	120.4	40.64	1.36	5.884	1.29	2.27
ARITH. MEAN :	11.9	7.36	0.38	1.526	0.15	0.53
ARITH. STD. DEV :	13.8	7.79	0.25	1.334	0.17	0.34
GEOM. MEAN :	7.3	4.81	0.30	1.109	0.09	0.42
1ST QUARTILE :	3.9	2.69	0.19	0.581	0.04	0.27
2ND QUARTILE :	8.2	4.26	0.34	1.064	0.09	0.49
3RD QUARTILE :	13.4	8.10	0.49	1.998	0.18	0.73

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AIR

PERIOD OF REPORT : JAN 12,88 TO DEC 31,88

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	NITRIC AS N UG/M**3	AMMONIUM AS N UG/M**3	NITRATE AS N UG/M**3	TOTL NO3 AS N UG/M**3
# OF SAMPLES :	331.0	331.00	331.00	328.000	330.00	330.00
MAXIMUM :	70.1	51.28	1.56	14.213	3.70	3.94
MINIMUM :	0.0	0.01	0.00	0.000	0.00	0.00
RANGE :	70.1	51.27	1.56	14.213	3.70	3.94
ARITH. MEAN :	7.3	4.84	0.28	1.609	0.63	0.91
ARITH. STD. DEV :	8.5	5.55	0.34	1.695	0.66	0.75
GEOM. MEAN :	4.0	3.20	0.15	0.959	0.36	0.58
1ST QUARTILE :	1.7	1.85	0.05	0.508	0.13	0.29
2ND QUARTILE :	4.6	3.32	0.13	1.172	0.41	0.77
3RD QUARTILE :	10.2	5.44	0.34	2.153	1.00	1.35

PART VIII

SUMMARY STATISTICS OF AIR CONCENTRATION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/DAILY/AIR

PERIOD OF REPORT : DEC 31,87 TO DEC 31,88

PAGE : 1

	SULPHUR DIOXIDE UG/H**3	SULPHATE UG/H**3	NITRIC AS N UG/H**3	AMMONIUM AS N UG/H**3	NITRATE AS N UG/H**3	TOTAL NO3 AS N UG/H**3
# OF SAMPLES :	653.0	656.00	657.00	651.000	657.00	657.00
MAXIMUM :	43.5	73.10	1.31	7.083	2.01	2.29
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00
RANGE :	43.5	73.10	1.31	7.083	2.01	2.29
ARITH. MEAN :	5.0	3.51	0.21	0.742	0.16	0.37
ARITH. STD. DEV :	6.2	5.25	0.24	0.957	0.25	0.41
GEOM. MEAN :	2.4	2.12	0.16	0.390	0.10	0.22
1ST QUARTILE :	0.7	1.15	0.04	0.142	0.02	0.08
2ND QUARTILE :	2.8	2.04	0.12	0.385	0.06	0.20
3RD QUARTILE :	6.8	3.89	0.31	0.965	0.18	0.55

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHEASTERN/DAILY/AIR

PERIOD OF REPORT : FEB 3,88 TO DEC 31,88

PAGE : 1

	SULPHUR DIOXIDE UG/H*3	SULPHATE UG/H*3	NITRIC AS N UG/H*3	AMMONIUM AS N UG/H*3	NITRATE AS N UG/H*3	TOTL NO3 AS N UG/H*3
# OF SAMPLES	: 691.0	: 691.00	: 691.00	: 690.000	: 691.00	: 691.00
MAXIMUM	: 82.4	: 22.81	: 1.24	: 4.234	: 1.55	: 1.78
MINIMUM	: 0.0	: 0.00	: 0.00	: 0.000	: 0.00	: 0.00
RANGE	: 82.4	: 22.81	: 1.24	: 4.234	: 1.55	: 1.78
ARITH. MEAN	: 4.3	: 2.29	: 0.11	: 0.445	: 0.05	: 0.16
ARITH. STD. DEV	: 9.4	: 2.71	: 0.16	: 0.611	: 0.12	: 0.22
GEOM. MEAN	: 1.4	: 1.43	: 0.09	: 0.225	: 0.07	: 0.10
1ST QUANTILE	: 0.2	: 0.77	: 0.02	: 0.099	: 0.00	: 0.04
2ND QUANTILE	: 1.0	: 1.45	: 0.05	: 0.237	: 0.02	: 0.08
3RD QUANTILE	: 4.6	: 2.58	: 0.14	: 0.505	: 0.05	: 0.18

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN/DAILY/AIR

PERIOD OF REPORT : DEC 31.87 TO DEC 31.88

PAGE : 1

# OF SAMPLES	SULPHUR DIOXIDE UG/H**3	SULPHATE UG/H**3	NITRIC AS N UG/H**3	AMMONIUM AS N UG/H**3	NITRATE AS N UG/H**3	TOTAL NO3 AS N UG/H**3
:	330.0	330.00	330.00	329.000	330.00	330.00
MAXIMUM	5.6	11.42	1.07	2.822	1.18	2.19
MINIMUM	0.0	0.00	0.00	0.000	0.00	0.00
RANGE	5.6	11.42	1.07	2.822	1.18	2.19
ARITH. MEAN	1.0	1.38	0.10	0.327	0.08	0.18
ARITH. STD. DEV	1.1	1.36	0.13	0.409	0.17	0.26
GEOM. MEAN	0.7	0.96	0.12	0.181	0.14	0.13
1ST QUANTILE	0.2	0.60	0.01	0.068	0.00	0.04
2ND QUANTILE	0.5	0.99	0.06	0.199	0.04	0.09
3RD QUANTILE	1.4	1.66	0.13	0.418	0.07	0.20

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN/DAILY/AIR

PERIOD OF REPORT : DEC 31,87 TO DEC 31,88

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	NITRIC AS N UG/M**3	AMMONIUM AS N UG/M**3	NITRATE AS N UG/M**3	TOTL NO3 AS N UG/M**3
# OF SAMPLES :	237.0	237.00	237.00	236.000	235.00	235.00
MAXIMUM :	82.6	28.15	1.57	5.688	1.16	2.01
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00
RANGE :	82.6	28.15	1.57	5.688	1.16	2.01
ARITH. MEAN :	3.9	3.51	0.33	0.809	0.12	0.45
ARITH. STD. DEV :	7.0	4.89	0.35	1.116	0.16	0.42
GEOM. MEAN :	1.9	1.94	0.26	0.531	0.1?	0.34
1ST QUARTILE :	0.6	0.66	0.07	0.120	0.03	0.13
2ND QUARTILE :	1.7	1.84	0.21	0.431	0.07	0.31
3RD QUARTILE :	4.5	3.97	0.46	1.013	0.14	0.70

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN/DAILY/AIR

PERIOD OF REPORT : DEC 31,87 TO DEC 31,88

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	NITRIC AS N UG/M**3	AMMONIUM AS N UG/M**3	NITRATE AS N UG/M**3	TOTL NO3 AS N UG/M**3
# OF SAMPLES :	777.0	777.00	777.00	774.000	776.00	776.00
MAXIMUM :	70.1	51.28	2.67	14.213	3.70	3.94
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00
RANGE :	70.1	51.28	2.67	14.213	3.70	3.94
ARITH. MEAN :	8.2	4.70	0.31	1.418	0.57	0.88
ARITH. STD. DEV :	8.5	5.45	0.36	1.482	0.60	0.71
GEOM. MEAN :	4.7	3.10	0.18	0.873	0.34	0.58
1ST QUANTILE :	2.3	1.80	0.07	0.476	0.14	0.31
2ND QUANTILE :	5.7	3.05	0.16	1.005	0.38	0.76
3RD QUANTILE :	11.0	5.35	0.41	1.795	0.79	1.24

